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Parts I and II
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AFSC 2A5X3D

AIRBORNE SURVEILLANCE RADAR SYSTEMS



CAREER FIELD EDUCATION AND TRAINING PLAN

**CAREER FIELD EDUCATION AND TRAINING PLAN
AIRBORNE SURVEILLANCE RADAR SYSTEMS
AFSC 2A5X3D**

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AIRBORNE SURVEILLANCE RADAR SYSTEMS
AFSC 2A5X3D
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PART I

PREFACE

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training. To read, review, or print a copy of current CFETP, go to the Aircraft Maintenance Homepage at: <http://www.il.hq.af.mil/ilm/ilmm/acmaint/index.html>. **NOTE:** Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts; supervisors will use both parts of the CFETP to plan, manage, and control training within the career field.

2.1. Part I provides information necessary for overall management of the specialty. **Section A** explains how everyone will use the plan. **Section B** identifies career field progression information, duties and responsibilities, training strategies, and career field path. **Section C** associates each level with specialty qualifications (knowledge, education, training, and other). **Section D** indicates resource constraints. Some examples are funds, manpower, equipment, and facilities. **Section E** identifies transition training guide requirements to support career field restructures.

2.2. Part II includes the following: **Section A** identifies the Specialty Training Standard (STS) and includes duties, tasks, technical references to support training; Air Education and Training Command (AETC) conducted training; wartime course requirements; core task; and correspondence course requirements. **Section B** contains the course objective list and training standards supervisors use to determine if airmen satisfied training requirements. **Section C** identifies available support materials. An example is Qualification Training Packages (QTPs) developed to support proficiency training. These packages are identified in AFIND 8, *Numerical Index of Specialized Educational Training Publications*. **Section D** identifies a training course index supervisors can use to determine resources available to support training; included here are both mandatory and optional courses. **Section E** identifies MAJCOM unique training requirements supervisors use to determine additional training requirements unique to the MAJCOM.

3. Using guidance provided in the CFETP will ensure individuals in the specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Job Qualification Standard (AFJQS). A comprehensive task list which describes a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document encapsulating the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

Certification. A formal indication of an individual's ability to perform a task to required standards.

Certification Official. A person the commander assigns to determine an individual's ability to perform a task to required standards.

Continuation Training. Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. A task Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirement within an Air Force specialty regardless of duty position. Core tasks identified with an */R are optional for AFRES and ANG.

Course Objective List (COL). A publication, derived from initial and advanced skills course training standards, identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-, 5-, or 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing and Conducting Military Training Programs*.

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Field Technical Training (Type 4). Special or regular on-site training conducted by a field training detachment (FTD) or by a mobile training team.

Initial Skills Training. A formal resident course which results in award of the entry level.

Instructional System Development (ISD). A deliberate and orderly, but flexible process for planning, developing, implementing, and managing instructional systems. It ensures personnel are taught in a cost efficient way the knowledge, skills, and attitudes essential for successful job performance.

Mission Ready Technician. A formal course which results in an airman receiving hands-on training and task certification of selected tasks so the individual will be immediately productive upon arrival at their first duty station.

Occupational Survey Report (OSR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training conducted to certify personnel in both upgrade (skill level award) and job qualification (duty position certification) training.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an individual in a specific duty position. This portion of the dual channel on-the-job training program occurs both during and after the upgrade training process. It is designed to provide the performance skills required to do the job.

Qualification Training Package (QTP). An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

Radar System. Includes AWACS/JSTARS radar and the interrogator system.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being delivered.

Specialty Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by National Security Agency (NSA), and administered by qualified communications security (COMSEC) maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes skills and knowledge that airman in a particular Air Force specialty need on the job. It further serves as a contract between the Air Education and Training Command and the user to show the overall training requirements for an Air Force specialty code that the formal schools teach.

Standard. An exact value, a physical entity, or an abstract concept, established and defined by authority, custom, or common consent to serve as a reference, model, or rule in measuring quantities or qualities, establishing practices or procedures, or evaluating results. A fixed quantity or quality.

Total Force. All collective Air Force components (active, reserve, guard, and civilian elements) of the United States Air Force.

Training Impact Decision System (TIDES). A computer-based decision support technology designed to assist Air Force career field managers in making critical judgments relevant to what training should be provided personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

Upgrade Training (UGT). Mandatory training that leads to attainment of higher level of proficiency.

Utilization and Training Workshop (U&TW). A forum of MAJCOM Air Force Specialty Code (AFSC) functional managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

SECTION A - GENERAL INFORMATION

1. Purpose. This CFETP provides information necessary for Air Force Career Field Managers (AFCFM), MAJCOM Functional Managers (MFMs), commanders, training managers, supervisors and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A5X3D should receive to develop and progress throughout their career. This CFETP identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC at one of the technical training centers. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course requirements for award of the 3-, 5-, 7-, 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field's training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies task and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty, identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints that impact full implementation of the desired career field training process.

2. Uses. The plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, Training Detachment (TD) and exportable training based on requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining resources needed to provide identified training.

2.2. MFMs will ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM-developed mandatory training, to support this AFSC, must be identified for inclusion into plan and must not duplicate other available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The lists of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approval authority. The using MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for AFSC 2A5X3D will initiate an annual review of this document by AETC and MAJCOM AFSC functional managers to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training.

SECTION B - CAREER PROGRESSION AND INFORMATION

4. Specialty Description.

4.1. Specialty Summary (Apprentice-Craftsman): Inspects, modifies, and maintains airborne warning and control system (AWACS) surveillance radar, joint surveillance target attack radar systems (JSTARS), and interrogator systems. Related DoD Occupational Subgroup: 104.

4.1.1. Duties and Responsibilities.

Airborne Surveillance Radar Systems Apprentice and Journeyman (2A533D/53D). Inspects and performs surveillance radar systems and interrogator systems maintenance. Inspects and tests radar and interrogator systems to locate defects such as cracked or deteriorated wiring, loose mountings, and defective connections. Modifies equipment according to time compliance technical orders and other directives. Isolates malfunctioning radar equipment using built-in and manual fault isolation testing and diagnostic routines. Checks components for technical order compliance. Verifies equipment performance and modifications. Maintains ground test stations, support equipment (SE), and maintenance records. Operates and maintains surveillance radar transmitter and radar computer test stations; radar and interrogator systems SE; and posts entries on maintenance forms.

4.1.1.2. Airborne Surveillance Radar Systems Craftsman (2A573D). Advises on problems of fault detection and isolation, maintenance, and modification of surveillance radar systems and interrogator systems. Analyzes equipment operating characteristics to determine sources of malfunctions. Identifies maintenance problem areas, and recommends corrective action. Performs production functions. Coordinates maintenance plans to meet operational commitments. Supervises and assists in aircraft launching and recovery. Reviews maintenance data collection summaries to determine trends and production effectiveness. Debriefs flight personnel.

4.2. Specialty Summary Avionics Superintendent (2A590). Manages and directs maintenance functions and activities. Included are areas of avionics sensors, communications and navigation, guidance and control, airborne warning and control radar, inertial and radar navigation, airborne command post communication systems, avionics test stations, electronic warfare (EW) systems, and avionics support equipment. Related DoD Occupational Subgroup: 102.

4.2.1. Duties and Responsibilities:

4.2.1.1. Plans, organizes, and directs avionic activities. Establishes production controls and work standards. Analyzes reports on the installation, removal, overhaul, repair, calibration, and modification of avionics systems and associated support equipment.

4.2.1.2. Directs avionics activities. Directs, controls, and plans inspection, removal, replacement, calibration, and repair of avionics systems and associated support equipment. Determines extent and economy of repair or replacement of components. Coordinates with supply, operations, and other maintenance activities to improve procedures and ensure mission support.

4.2.1.3. Inspects and evaluates avionics activities. Establishes and checks inspection procedures. Inspects activities to solve maintenance, supply, manpower, and personnel problems. Interprets findings, and recommends corrective action. Ensures compliance with directive governing handling, use, and disposal of hazardous waste and material.

4.2.1.4. Performs avionics functions. Solves problems and interprets publications for inspection, repair, modification, overhaul, removal, installation, and calibration of avionics systems and associated equipment. Plans and implements budget, modifications, and acquisition processes. Plans and executes mobility programs and equipment deployments. Plans physical layout of facilities, and ensures support equipment and spare parts availability.

5. Skill and Career Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential that everyone involved in training do their part to plan, develop, manage and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives proper training at appropriate points in their career. The following narrative and the AFSC 2A5X3D Enlisted Career Training Flowcharts identify the career skill progression.

5.1. Apprentice (3 Level). Upon completion of initial skills training, a trainee will work with a trainer to enhance their knowledge and skills. They will utilize the Career Development Course, Task Qualification Training, and available exportable courses for continued advancement. Once task certified, a trainee may perform the task unsupervised. Apprentices can be considered for appointment as unit trainers after completion of a formal trainer course.

5.2. Journeyman (5 Level). Once upgraded to the 5-skill level, a journeyman will enter into continuation training to broaden their experience base. Journeyman may be assigned job positions such as squadron support, software analysis, quality assurance and various staff positions. Journeyman should complete available TD courses and MAJCOM specific training. Individuals will attend the Airman Leadership School (ALS) after having 48 months in the Air Force. Journeyman will be considered for appointment as unit trainers after completion of a formal trainer course. They should attend the available Airborne Surveillance Radar Systems advanced technical training courses for the assigned Mission Design Series (MDS). Individuals will use their CDCs to prepare for testing under the Weighted Airman Promotion System (WAPS). They should also

consider continuing their education toward a Community College of the Air Force (CCAF) degree. Timelines and requirements may vary for ANG and AFRC.

5.3. Craftsman (7 Level). A craftsman can expect to fill various supervisory and management positions such as shift leader, element chief, flight/section chief, and task certifier. They will also be assigned to work in staff positions. Craftsmen should take courses or obtain added knowledge in other avionic systems and in resource/personnel management. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will complete the Noncommissioned Officer Academy. MSGts are eligible to enroll in the Senior NCO Correspondence Course.

5.4. Superintendent (9 Level). A 9-level can be expected to fill positions such as flight NCOIC, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will complete the Senior Noncommissioned Officer Academy. Additional higher education and completion of courses outside of their career AFSC are also recommended.

6. Training Decisions. The CFETP was developed using a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Airborne Surveillance Radar System career field. The spectrum includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication, and prevent a fragmented approach to training. The following decisions were made by MAJCOM Functional Managers and Subject Matter Experts (SMEs) at the Career Field Utilization and Training Workshop (U&TW) held at Sheppard AFB, 22-26 January 2001 and the follow-on U&TW held at Keesler AFB, 20-23 February 2001.

6.1. Initial Skills Training. A decision was made to revise both the current E-3 AWACS 3-level course and the E-8 JSTARS 3-level course. Course revisions are scheduled for October 2002 and are timed to coincide with the modification schedule of the E-3 and E-8 aircraft. Major changes include modification of subject knowledge to include Radar System Improvement Program and Computer Replacement Program data. The existing trainers at Keesler AFB are not adequate to support training after the modifications are complete, and there is currently no funding projected for replacement or upgrade of either the AWACS or JSTARS trainers. Hand-on training will shift to the training detachments where upgraded trainers are available.

6.2. Five Level Upgrade Training Requirements. The 5-level CDC requirements were reaccomplished to update the CDC to include information on E-3 (RSIP) and E-8 (CRP) modifications. The 5-level CDC is changed to 2A553D and is divided into three courses: D, E, and F. Course D covers common electronic principles, maintenance procedures, and radar theory. Course E covers the AWACS radar system and Course F covers the JSTARS surveillance system. Completion of all three is required for 5-level up-grade.

6.3. Seven Level Upgrade Training Requirements. The 7-level in-residence course remains mandatory and is changed to J3ACR2A573 001 to incorporate more hands-on training. The CDC remains 2AX7X

6.4. Continuation Training. The purpose of the continuation training program is to provide additional training exceeding the minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs develop a continuation training program that ensures individuals in the Airborne Surveillance Radar Systems career field receive the

necessary training at the appropriate point in their career. The training program will identify both mandatory and optional training requirements.

7. Community College of the Air Force (CCAF) Academic Programs: Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associates in Applied Sciences Degree. In addition, CCAF offers the following:

7.1 Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of the Basic Instructor Course (BIC) and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2. Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The college uses a competency based assessment process for trade skill certification at one of four proficiency levels: Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. Degree Requirements. All airmen are automatically entered into the CCAF program. Prior to completing an Associates Degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education.....	4
General Education.....	15
Program Elective.....	15
Technical Education; Leadership, Management, and Military Studies; or General Education	
Total	64

7.3.1. Technical Education (24 Semester Hours): A minimum of 12 semester hours of Technical Core subjects/courses must be applied and the remaining semester hours applied from Technical Core/Technical Elective subjects/courses.

7.3.2 Leadership, Management, and Military Studies (6 Semester Hours). Professional military education and/or civilian management courses.

7.3.3. Physical Education (4 Semester Hours). This requirement is satisfied by completion of Basic Military Training.

7.3.4. General Education (15 Semester Hours). Applicable courses must meet the definition of General Education Requirement (GER) subjects/courses as provided in the CCAF General Catalog.

7.3.5. Program Elective (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree applicable technical credit otherwise not applicable to this program may be applied. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.

7.4. AETC Instructor Requirements: Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command

Instructor should be actively pursuing an associates degree. It is necessary to have at least a two-year associate degree to maintain technical school accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path

8.1. **Enlisted Career Path.** Table A8.1 identifies career milestones for the 2A5X3D Air Force Specialty.

Table 8.1 Enlisted Career Path				
Education and Training Requirements	Grade Requirements			
	Rank	Average Sew-On	Earliest Sew-On	High Year Of Tenure (HYT)
Basic Military Training School				
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 15 months on-the-job training. - Complete all 5-level core tasks on one MDS. - Complete appropriate CDC if/when available.	Amn A1C SrA	6 months 16 months 3 years	28 months	12 Years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).				
<u>Trainer</u> - Qualified and certified to perform the task to be trained. - Have attended the formal trainer's course and appointed in writing by Commander.	<u>Certifier</u> - Be at least a 5-skill level SSgt; and qualified and certified to perform the task being certified - Attend formal certifier course and appointed in writing by Commander. - Be a person other than the trainer.			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt. - Complete all 5- and 7-level core tasks on one MDS. - 18 months OJT. - Complete appropriate CDC if/when available. - Advanced Technical School.	SSgt	7.5 years	3 years	20 Years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt Selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt	12.5 years	5 years	24 Years
	MSgt	16 years	8 years	26 Years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt Selectee. - A percentage of top non-select (for promotion to E-8) MSgts attend the SNCOA each year. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	19.2 years	11 years	28 Years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	21.5 years	14 years	30 Years

8.2. Base/Unit Education and Training Manager Checklist:

Table A8.2. Base/Unit Education and Training Manager Checklist		
Requirements for Upgrade to:	Y	N
Journeyman - Has the apprentice completed mandatory CDCs, if available? - Has the apprentice completed all appropriate 5-level core tasks identified in the CFETP? - Has the apprentice completed all other duty position tasks identified by the supervisor? - Has the apprentice completed 15 months training (9 months for retrainees) for award of the 5-skill level? - Has the apprentice met mandatory requirements listed in specialty description, AFMAN 36-2108 (Airman Classification), and CFETP? - Has the apprentice completed CAMS Course J6AZU00066-058? (Exception: AMC and AMC gained ANG/AFRC Personnel). - Has the apprentice been recommended by their supervisor?		
Craftsman - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs? - Has the journeyman completed all core tasks identified in the CFETP? - Has the journeyman completed all other duty position tasks identified by the supervisor? - Has the journeyman completed CAMS Course J6AZU00066-062? (Exception: AMC and AMC gained ANG/AFRC personnel). - Has the journeyman attended 7-skill level Craftsman Course? First, they must complete: -- All 7-level training requirements listed in the CFETP. -- All applicable CDCs. -- Exportable course J6AQU2A071 000 -- A minimum of 12 months UGT (6 months for retrainees). - Has the journeyman completed a minimum 18 months UGT (12 months for retrainees) for award of the 7-skill level		

TO: Squadron/CC

FROM: Squadron Training Manager

SUBJECT: Upgrade Trainee

Trainee is prepared to be upgraded and has completed all training requirements.

Training Manager

Supervisor

SECTION C - SKILL LEVEL TRAINING REQUIREMENTS

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in general terms and establishes the mandatory requirements for entry, award and retention of each skill level. The specific task and knowledge training requirements are identified in the STS in Part II, Sections A and B of this CFETP.

10. Specialty Qualification: The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. The specific task and knowledge training requirements are identified in the STS in Part II, Section A of the CFETP. Unit work centers must develop a structured training program to ensure the following requirements are met.

10.1. Apprentice Level Training (3-Level):

10.1.1. Specialty Qualification. To perform duties at the apprentice level, an individual must be able to understand basic system theory of operation and be able to perform certain organizational maintenance tasks under close supervision until task certification is complete.

10.1.1.1. Knowledge. Knowledge is mandatory of: electronic and computer fundamentals, solid state devices, numbering systems, and principles of radio frequency transmission and reception applied to AWACS and JSTARS surveillance radar and interrogator systems; concepts and application of maintenance directives; wiring, logic, and schematic diagrams; digital data processing; pulse Doppler radar theory; nuclear hardness integrity maintenance; and Air Force supply procedures.

10.1.1.2. Education. For entry into this specialty, completion of high school with courses in physics and mathematics is desirable.

10.1.1.3. Training. For award of AFSC 2A533D, completion of a basic airborne surveillance radar systems maintenance course is mandatory.

10.1.1.4. Experience. The following experience is mandatory for award of the AFSC indicated:

10.1.1.4.1 2A553D. Qualification in and possession of AFSC 2A533D and experience installing, repairing, testing, or modifying surveillance radar and interrogator systems using electronic test equipment.

10.1.1.4.2. 2A573D. Experience performing or supervising functions such as manual testing, installing, repairing, or modifying radar and interrogator systems using test equipment.

10.1.1.5. Other. The following are mandatory as indicated:

10.1.1.5.1 For entry into this specialty, normal color vision as defined in AFI 48-123 *Medical Examination Standards*.

10.1.1.5.2. For additional *Other* entry requirements consult AFMAN 36-2108, *Enlisted Classification*.

10.1.1.5.3 For award and retention of AFSCs 2A533D/53D/73D, eligibility for a secret security clearance is according to AFI 31-501, *Personnel Security Program Management*.

10.1.2. Training Sources. The initial skills courses (see part II section D) are focused to increase "hands-on" time with task performance as the basic learning foundation. These courses will provide the required knowledge and qualification training. Initial skills training encompasses basic system theory and operation, system components, component removal and installation, introduction to maintenance concepts, general flightline maintenance practices, use

of technical publications, maintenance documentation, and support equipment familiarization and use.

10.1.3. Implementation. Upon graduation from Basic Military Training, airmen are assigned to Keesler AFB for completion of courses E3AQR2A533D 332, Electronic Principles. Airmen will then attend course J3ABR2A533D XXX at Sheppard AFB. They will then attend a mandatory aircraft specific hands-on training course at either the Tinker TD or the Robins TD. Upon graduation from these courses, airmen should attend appropriate airframe specific FTD courses.

10.2. Journeyman Level Training (5-Level):

10.2.1 Specialty Qualification. In addition to the 3-level qualifications, a 5-level must possess knowledge and skills necessary to maintain avionics systems.

10.2.1.1. Knowledge. An individual must be task qualified on: inspecting Airborne Surveillance Radar System and Interrogator system components, removal and installation of system SRUs, repair and replacement of components, BIT/FIT/Diagnostics test, and the use of test and support equipment. Individuals must be able to apply the proper handling, use and disposal of hazardous waste and materials according to environmental standards.

10.2.1.2. Education. There is no formal education for upgrade to 2A553D.

10.2.1.3. Training. Requirements for the journeymen level require completion of the 5-level CDC and completion of the 5-level core tasks specified in the STS.

10.2.1.4. Experience. Qualification in and possession of AFSC 2A533D. Also, experience performing or supervising functions such as removing and installing system LRUs and SRUs, performing operational checks, and troubleshooting surveillance radar/interrogator/mission systems.

10.2.1.5. Other. Normal color vision as defined in AFI 48-123 is mandatory.

10.2.2. Training Sources and Resources. The 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base and provides more in-depth knowledge to support OJT requirements.

10.2.3. Implementation. Training to the 5-level is performed by the unit, utilizing STS, CDCs, and OJT. Upgrade to the 5-level requires completion of the 2A553D, Airborne Surveillance Radar Systems Journeyman CDC; the 2A553E, Airborne Warning and Control/Interrogator Systems Journeyman CDC; the 2A553F, Joint Surveillance Target Attack Radar Systems Journeyman CDC; and completion of all 5-level core tasks on one MDS aircraft.

10.3. Craftsman Level Training (7-Level):

10.3.1 Specialty Qualification. In addition to the 5-level qualifications, an individual must possess advanced skills and knowledge in theory, concepts, principles, and application as they apply to Airborne Surveillance Radar Systems and the Interrogator System.

10.3.1.1. Knowledge. The 7-level must be able to supervise and train personnel to perform required maintenance. They must be able to conduct long-range planning and scheduling, and be able to organize maintenance to ensure effective utilization of available resources. Qualification is required on advanced repair and inspection techniques; component and system fault isolation troubleshooting and diagnostics techniques; and repair requirements, procedures and evaluation. Historical documentation analysis is also required for all 7-levels.

10.3.1.2. Education. There are no additional educational requirements beyond those defined for the apprentice level.

10.3.1.3. Training. Completion of CDC 2AX7X and the resident 7-level course, J3ACR2A573 001, at Sheppard AFB TX is mandatory for upgrade to AFSC 2A573D.

10.3.1.4. Experience. Completions of all 5- and 7-level core tasks on one MDS aircraft as identified in the STS and qualification in and possession of AFSC 2A553D. Also, experience performing and supervising functions such as analyzing equipment operating characteristics to isolate malfunctions in Airborne Surveillance Radar Systems and Interrogator Systems.

10.3.1.5. Other. Normal color vision as defined in AFI 48-123 is mandatory..

10.3.2. Training Sources and Resources. Seven-level upgrade training will be conducted by certified trainers using AF core tasks, unit/MAJCOM specific courses, and formal 7-level in-residence course, J3ACR2A573 001 Craftsman Avionics Course. The 7-level CDC and resident courses are written to provide advanced system/management knowledge and troubleshooting skills.

10.3.3. Implementation. Upgrade to 7-level will require completion of all applicable 5- and 7-level AF core tasks on one MDS, 7-level CDCs, 18 months OJT as a SSgt and completion of the 7-level Craftsman Avionics Course. Completion of AF core tasks, 7-level CDC and 12 months OJT as a SSgt will be completed before attending the resident course.

10.4. Superintendent Level Training (9-level):

10.4.1 Specialty Qualification. In addition to 7-level qualifications, individuals must possess advanced skills and knowledge of concepts and principles in the management of aircraft maintenance.

10.4.1.1. Knowledge. The 9-level needs to be an effective leader; must be able to forecast, budget, and manage unit operations and maintenance (O&M) funding and other assigned resources; and must be knowledgeable of environmental standards and ensure adherence to the proper handling and disposal of hazardous materials.

10.4.1.2. Education. There are no additional requirements beyond those identified for the apprentice level.

10.4.1.3. Training. For award of AFSC 2A590, completion of applicable PME courses and promotion to SMSgt is mandatory.

10.4.1.4. Experience. Experience that is required for award of 2A590 AFSC is qualification in and possession of AFSC 2A571 or 2A572 or 2A573A/B/C/D. Also, experience managing or directing repair activities for offensive avionic systems and associated maintenance functions.

10.4.1.5. Other. Normal color vision as defined in AFI 48-123 is mandatory.

10.4.2. Training Sources and Resources. The Senior NCO Academy and unit OJT will be used for training.

10.4.3 Implementation. The 9-level will be awarded after completing MAJCOM requirements, unit OJT and promotion to SMSgt. Individuals will attend the Senior NCO Academy after they are selected for promotion to SMSgt. Guard and Reserve personnel may use the correspondence course.

SECTION D - RESOURCE CONSTRAINTS

11. Purpose. This section of the CFETP identifies known resource constraints that preclude optimal/desired training from being developed or conducted. Included is a narrative explanation of each resource constraint, an impact statement describing the effect on training, the resources needed, and actions required to satisfy the training requirements.

12. Apprentice Level Training Constraints.

12.1. Constraint. None

13. Five Level Training Constraints.

13.1. Constraint. None

14. Seven-Level Training Constraints.

14.1. Constraint. None

SECTION E - TRANSITIONAL TRAINING GUIDE

There are currently no transition training requirements. This area is reserved.

PART II

SECTION A - SPECIALTY TRAINING STANDARD

1. Implementation. This STS will be used for technical training provided by Air Education and Training Command (AETC) for classes beginning October 2002.

2. Purpose. As prescribed in AFI 36-2201, this STS:

2.1. Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level. The 7-level in-residence course will not be taught in wartime.

2.2. Column 2 (Core Tasks) identifies, by asterisk (*), specialty-wide training requirements. Core tasks identified with an *R are optional for the AFRC and the ANG. As a minimum, certification on all shop/flightline core tasks applicable to one Mission Design Series (MDS) aircraft assigned must be completed for skill level upgrade. Exemptions:

2.2.1. Core tasks that are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training)

2.2.2. For units with more than one MDS aircraft, upgrade trainees need only complete core tasks on a single MDS. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional MDSs, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one MDS. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.

2.2.3. Units that use the GO81 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) Computer Based Training (CBT) core tasks. However, these units must be capable of training CAMS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating CAMS prior to deploying to CAMS using units. This requirement will remain in effect until GO81 and CAMS are converted to the Integrated Maintenance Data System (IMDS).

2.3. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification completed date.

2.4. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course. When two codes are used in columns 4 (e.g. 2b/b), the first code is the established requirement for resident training on the task/knowledge, and the second code indicates the level of training provided in the course due to equipment shortages or other resource constraints. See CADRE/AFSC/CDC listing maintained by the Unit Training Manager for current CDC listing.

2.5. Qualitative Requirements. Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.6. Job Qualification Standard. Becomes a Job Qualification Standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level.

"Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

2.6.1 Documentation. Document and certify completion of training IAW AFMAN 36-2247, Chapter 5. Automated records, utilizing Core Automated Management System (CAMS) or Integrated Maintenance Data System (IMDS)/Global Combat Support System (GCSS), reflecting this STS may be used and are highly encouraged. The CFETP Section I and Section II, Part A must be filed in individual records. Use of attachments one, two and five are mandatory in records. In addition, use of either attachment three or four is required. MAJCOMs may designate additional core tasks other than those already identified in the CFETP. Identify duty position requirements by circling (in pencil) the subparagraph number next to the task statement. As a minimum, complete the following columns, date training completed, trainee initials, trainer initials, and certifier initials (core tasks only). Trainers may sign off non-core and non-critical tasks by initialing the trainer's column; third party certification is not required for non-core and non-critical tasks. There are no approved AFJQS for this AFSC.

2.6.1.1. Converting from Old Document to CFETP. Transcribe records IAW AFMAN 36-2247. All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Automated records reflecting this STS may be used and are highly encouraged. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications.

2.6.1.1.1. For those core and critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and certifier's initials. Remember, during the transcription process no training is taking place. Therefore, the trainer's initials are not required.

2.6.1.1.2. For non-core and non-critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and trainer's initials.

2.6.1.1.3. When transcribing previous certification for tasks not required in the current duty position, carry forward *only* the previous completion date of certification (not the initials of another person). If and when transcribed tasks become duty position requirements, recertify using standard certification procedures.

2.6.1.1.4. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements of their respective roles.

2.6.1.1.5. Upon completion of the transcription process, give the old CFETP to the member.

2.6.1.2. Documenting Career Knowledge. When a CDC is not available: the supervisor identifies CFETP Part II training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 36-2108. CDC information in **all** attachments of the CFETP are mandatory for five and seven-level upgrade. For two-time CDC course exam failures: supervisors identify all Part II items corresponding to the areas covered by the CDC. The trainee completes a study of references, undergoes evaluation by the task certifier, and receives certification on the CFETP Part II. *Supervisors must document successful completion of career knowledge prior to submission of a CDC waiver.*

2.6.1.3. Decertification and Recertification. When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using automated system. Appropriate

remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet**, as to the reason for decertification. The individual is recertified (if required) either by erasing the old entries and writing in the new or by using correction fluid/tape (if the entries were made in ink) over the previously certified entry.

2.6.2. AF Form 797. When additional items not listed in the CFETP Part II are necessary in the current duty assignment, enter them on the AF Form 797. Fill out the form IAW AFMAN 36-2247.

2.6.3. Disposition of Training Records. Upon separation, retirement, commissioning, or promotion to Master Sergeant (unless otherwise directed by the AFCFM, MAJCOM, unit commander, or supervisor), give the individual their training records. Also, give individuals outdated training records after transcribing records. Do not remove any training records that show past qualifications unless transcribed to a new CFETP. For example, an individual working in a tool crib or staff position must maintain documented career field qualifications in case they return to direct maintenance duty. Supervisors must exercise good judgment when removing training records not needed in current duty positions.

2.7. Specialty Training Standard. Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in chapter 14 of AFI 36-2606, *US Air Force Reenlistment, Retention, and NCO Status Programs*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

3. Recommendations. Report unsatisfactory performance of individual course graduates to the AETC Training Manager at, 365 TRS/TRR, 609 9th Ave., Sheppard AFB TX, 76311-2335, DSN 736-7891. Reference specific STS paragraphs. A customer service information line has been installed for the supervisors' convenience to identify graduates who may have received training on task/knowledge items in this training standard. For a quick response to problems, call our customer service information line, DSN 736-2574 or e-mail us at, 782trg-tget@sheppard.af.mil.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

JOHN W. HANDY, Lieutenant General, USAF
DCS/Installations and Logistics

5 Attachments

1. Proficiency Code Key (Mandatory to file with CFETP Section I and Section II, Part A)
2. Common Maintenance Requirements (Mandatory)
3. E3 AWACS Peculiar Requirements (Mandatory for E3 personnel)
4. E8 JSTARS Peculiar Requirements (Mandatory for E8 personnel)
5. Electronic Fundamentals/Applications (Mandatory)

NOTE: One of attachments 3 or 4 must be filed.

THIS BLOCK IS FOR IDENTIFICATION PURPOSES ONLY		
NAME OF TRAINEE		
PRINTED NAME (Last, First, Middle Initial)	INITIALS (Written)	SSAN
PRINTED NAME OF TRAINING/CERTIFYING OFFICIAL AND WRITTEN INITIALS		
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	
N/I	N/I	

QUALITATIVE REQUIREMENTS

PROFICIENCY CODE KEY		
	SCALE VALUE	DEFINITION: The individual
TASK PERFORMANCE LEVELS	1	IS EXTREMELY LIMITED. (Can do simple parts of the task. Needs to be told or shown how to do most of the task.)
	2	IS PARTIALLY PROFICIENT. (Can do most parts of the task. Needs only help on hardest parts.)
	3	IS COMPETENT. (Can do all parts of the task. Needs only a spot check of completed work.)
	4	IS HIGHLY PROFICIENT. (Can do the complete task quickly and accurately. Can tell or show others how to do the task.)
*TASK KNOWLEDGE LEVELS	a	KNOWS NOMENCLATURE. (Can name parts, tools, and simple facts about the task.)
	b	KNOWS PROCEDURES. (Can determine step by step procedures for doing the task.)
	c	KNOWS OPERATING PRINCIPLES. (Can identify why and when the task must be done and why each step is needed.)
	d	KNOWS ADVANCED THEORY. (Can predict, isolate, and resolve problems about the task.)
**SUBJECT KNOWLEDGE LEVELS	A	KNOWS FACTS. (Can identify basic facts and terms about the subject.)
	B	KNOWS PRINCIPLES. (Can identify relationship of basic facts and state general principles about the subject.)
	C	KNOWS ANALYSIS. (Can analyze facts and principles and draw conclusions about the subject.)
	D	KNOWS EVALUATION. (Can evaluate conditions and make proper decisions about the subject.)
EXPLANATIONS		
<p>A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)</p> <p>** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.</p> <p>- This mark is used alone instead of a scale value to show that no proficiency training is provided in the course or CDC.</p> <p>X This mark is used alone in course columns to show that training is required but not given due to limitations in resources.</p>		

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
<p>NOTE 1: Attachment 2 of the CFETP is used to code core competencies of the career field that are taught in the 3-level course. The MDS specific attachments are to be used in conjunction with attachment 2 to identify work center requirements and annotate qualifications.</p> <p>NOTE 2: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.</p> <p>NOTE 3: Users are responsible for annotating training references to identify current references pending STS revision.</p> <p>NOTE 4: Items marked in columns 2a or 2b marked with a */R are optional core tasks for ANG and AFRC.</p> <p>NOTE 5: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 487-8916.</p>											
A2.1. GENERAL ORGANIZATION MAINTENANCE TR: TO 1E-3A-2-7, 1E-3A-2-1-1											
A2.1.1. Aircraft Familiarization											
A2.1.1.1. Major structure areas								-	-	-	-
A2.1.1.2. Major systems								-	-	-	-
A2.1.1.3. Aircraft egress procedures								-	-	-	-
A2.1.2. GENERAL MAINTENANCE/PRODUCTION TEAM MAINTENANCE TASKS											
A2.1.2.1. Ensure aircraft safe for maintenance								-	-	-	-
A2.1.2.2. Static grounding								-	-	-	-
A2.1.2.3. Remove/Install maintenance panels								-	-	-	-
A2.1.2.4. Open/close engine cowlings								-	-	-	-
A2.1.2.5. Open/close nose radome								-	-	-	-
A2.1.2.6. Operate hydraulics								-	-	-	-
A2.1.2.7. Launch/Recover aircraft								-	-	-	-
A2.1.2.8. Marshall aircraft								-	-	-	-
A2.1.2.9. Aircraft tow											
A2.1.2.9.1. Wing walking								-	-	-	-
A2.1.2.9.2. Brake operator								-	-	-	-
A2.1.2.9.3. Tow vehicle operator								-	-	-	-
A2.1.2.9.4. Tow supervisor								-	-	-	-
A2.1.2.10. Refuel/Defuel											
A2.1.2.10.1. Panel operator								-	-	-	-
A2.1.2.10.2. Supervisor								-	-	-	-
A2.1.2.10.3. Fire guard								-	-	-	-
A2.1.2.11. Use Special Purpose Vehicles											
A2.1.2.11.1. High Reach								-	-	-	-
A2.1.2.11.2. De-Icier								-	-	-	-
A2.1.2.11.3. Operate cranes								-	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.1.2.12. Jack aircraft											
A2.1.2.12.1. Jack Supervisor								-	-	-	-
A2.1.2.12.2. Jack Member								-	-	-	-
A2.1.2.13. Perform aircraft phase/isochronal								-	-	-	-
A2.1.2.14. Maintain tool crib								-	-	-	-
A2.1.2.15. Debrief								-	-	-	-
A2.1.2.16. Dispatch maintenance crews		*						-	-	-	-
A2.1.2.17. Aircraft deicing								-	-	-	-
A2.1.2.18. Aircraft wash								-	-	-	-
A2.1.2.19. Connect external cooling air								-	-	-	-
A2.1.2.20. APPLY power using											
A2.1.2.20.1. APU TR: T.O. 1E-3A-2-71-1								-	-	-	-
A2.1.2.20.2. Generator Set								-	-	-	-
A2.1.2.20.3. Aircraft/Equipment hazardous condition tags TR: T.O.00-20-5								-	-	-	-
A2.2. CAREER LADDER PROGRESSION TR. AFI 36-2108, AFVA 39-1											
A2.2.1. Progression in career ladder 2A5X3D								A	-	-	-
A2.2.2. Duties of 2A5X3D 3-, 5-, and 7-level personnel								A	-	-	-
A2.3. SECURITY											
A2.3.1. Information Security TR: AFI 31-401, 31-501, AFD 31-4, 31-5 Applicable directives											
A2.3.1.1. Classification of information								A	-	-	B
A2.3.1.2. Prevention of security violations								A	-	-	-
A2.3.1.3. Access to classified information								A	-	-	B
A2.3.2. Physical Security TR: AFI 31-101V1, DODR 5200-8											
A2.3.2.1. Control of restricted areas								-	-	-	-
A2.3.2.2. Security alert reporting								A	-	-	-
A2.3.2.3. Make entries on cabinet, safes, and room security forms								-	-	-	B
A2.3.2.4. Proper handling of classified materials								A	-	-	-
A2.3.3. Communications Security (COMSEC) TR: AFI 31-401, DOD 5200.1-4											
A2.3.3.1. COMSEC								A	-	-	B

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.3.3.2. Specific 2A5X3D vulnerabilities								A	-	-	-
A2.3.4. Operations Security (OPSEC) TR: AFI 10-1101, AFD 10-11; Applicable directives											
A2.3.4.1. Goals of OPSEC program								A	A	-	B
A2.3.4.2. Relationship to other programs								-	-	-	-
A2.3.4.3. Specific 2A5X3D vulnerabilities								A	-	-	-
A2.3.4.4. Function of CILS (critical information lists)								A	-	-	-
A2.3.5. Computer security (COMPUSEC)								A	-	-	-
A2.4. AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 91-series; TO 31, 33 series											
A2.4.1. AFOSH standards for AFSC 2A5X3D		*						A	-	-	-
A2.4.2. Maintain safe work area								A	-	-	-
A2.4.3. Hazards/Safety Practices of AFSC 2A5X3D											
A2.4.3.1. RF energy								A	B	-	-
A2.4.3.2. Noise								A	B	-	-
A2.4.3.3. Compressed gases								A	B	-	-
A2.4.3.4. Electrical power								A	B	-	-
A2.4.3.5. Hydraulic power								-	-	-	-
A2.4.3.6. Hazardous liquids								A	B	-	-
A2.4.3.7. High Voltage								A	B	-	-
A2.4.3.8. Aircraft								A	B	-	-
A2.4.3.9. AGE equipment								A	-	-	-
A2.4.3.10. Electrical equipment								A	B	-	-
A2.4.3.11. CRTs								A	B	-	-
A2.4.3.12. Lifting Devices								-	-	-	-
A2.4.3.13. FOD prevention program								A	-	-	-
A2.4.3.14. AF Nuclear Surety Program								-	-	-	-
A2.4.3.15. Cleaning Agents								A	B	-	-
A2.5. HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS TR: AFI 23-504, EPA & State Regulations											
A2.5.1. Types of hazardous material /fluids								A	B	-	-
A2.5.2. Handling								A	B	-	B
A2.5.3. Storage and labeling								A	B	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.5.4. Disposal								A	B	-	B
A2.5.5. Material Safety Data Sheet								A	B	-	-
A2.5.6. Report Hazard Material Spills								-	-	-	-
A2.6. MAINTENANCE MANAGEMENT TR: ACCI 21-101											
A2.6.1. Basic functions and responsibilities of the maintenance complex								A	B	-	B
A2.6.2. Maintenance Data Collection								A	B	-	-
A2.6.3. Automated Maintenance System								-	-	-	-
A2.6.4. Maintenance accountability								-	B	-	B
A2.6.5. Operational Risk Management								A	-	-	B
A2.6.6. Logistics/Resource Maintenance Management											
A2.6.6.1. Logistics Management		*						-	A	-	B
A2.6.6.2. Resource Management		*						-	-	-	B
A2.6.6.3. Standard Publication Use								-	A	-	-
A2.6.6.4. Deficiency Reporting								-	A	-	B
A2.6.6.5. Product Improvement Working Group, Test Planning Working Group, System Training Plan, and Product Improvement Review								-	-	-	A
A2.6.6.6. Financial Plan								-	-	-	A
A2.6.6.7. SMR Codes (AFTO Form 135)								-	A	-	B
A2.6.6.8. Modification Proposals (AF Form 1067)								-	-	-	A
A2.6.6.9. Aircraft/Equipment Status Monitoring		*						-	-	-	-
A2.6.6.10. Maintenance QPM Relationships (repeat/recur, fix, break, cann rates etc.)								-	A	-	B
A2.6.6.11. FOD Program Manager								-	-	-	-
A2.6.6.12. Mobility (hazard declarations)								-	-	-	-
A2.6.6.13. Expediter, Production Supervisor and Flight Chief Duties and Responsibilities								-	A	-	B
A2.6.6.14. Maintenance Incident Investigation and Prevention								-	-	-	B
A2.6.6.15. AFMC Responsibility								-	-	-	-
A2.6.6.16. Mission Essential System Listing								-	A	-	B
A2.6.6.17. Warranty Program								-	A	-	B
A2.6.6.18. TMDE Program								-	-	-	A
A2.6.6.19. IDEA Program								-	-	-	-
A2.6.6.20. Repair Cycle Asset Program								-	A	-	B

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.7. MAINTENANCE AND INSPECTION TR: AFI 21-101											
A2.7.1. Maintenance systems								A	B	-	-
A2.7.2. Aircraft inspection systems								A	B	-	-
A2.7.3. Use Maintenance Data Collection Forms								-	-	-	-
A2.7.4. Historical Records								-	-	-	A
A2.7.5. Status Reports								-	-	-	A
A2.7.6. Configuration Management (aircraft/equipment records)								-	A	-	B
A2.7.7. Operate Core Automated Maintenance Systems (CAMS)											
A2.7.7.1. Create discrepancy	*							2b	-	-	-
A2.7.7.2. Schedule discrepancy	*							2b	-	-	-
A2.7.7.3. Defer discrepancy	*							2b	-	-	-
A2.7.7.4. Transfer discrepancy	*							2b	-	-	-
A2.7.7.5. Sign off discrepancy											
A2.7.7.5.1. Cannibalization	*							2b	-	-	-
A2.7.7.5.2. Action taken code "P"	*							2b	-	-	-
A2.7.7.5.3. Action taken code "Q"	*							2b	-	-	-
A2.7.7.5.4. Action taken code "R"	*							2b	-	-	-
A2.7.7.5.5. Special Inspections								-	-	-	-
A2.7.7.5.6. Supply transactions								2b	-	-	A
A2.7.7.5.7. Maintenance/Supervision Transactions								-	-	-	A
A2.7.8. INTEGRATED MAINTENANCE DATA SYSTEM (IMDS) TR: AFI 21-101											
A2.7.8.1. IMDS training subsystem											
A2.7.8.1.1. Purpose of the IMDS training subsystem								A/-	B/-	-	B/-
A2.7.8.1.2. Document Master Task List (MTL)								-	-	-	B/-
A2.7.8.1.3. Perform Ad Hoc inquiry								-	-	-	B/-
A2.7.8.1.4. Identify duty position requirements								-	-	-	B/-
A2.7.8.1.5. Document task certification								A/-	B/-	-	B/-
A2.7.8.2. IMDS Maintenance Data Collection (MDC)											
A2.7.8.2.1. Purpose of MDC process								A/-	B/-	-	-
A2.7.8.3. Use IMDS to:											
A2.7.8.3.1. Create jobs	*							3c/-	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.7.8.3.2. Transfer jobs	*							2b/-	-	-	-
A2.7.8.3.3. Clear jobs	*							3c/-	-	-	-
A2.7.8.3.4. Document component maintenance actions	*							2b/-	-	-	-
A2.7.8.3.5. Document Cannibalization	*							2b/-	-	-	-
A2.7.8.3.6. Use Portable Maintenance Aid (PMA)	*							2b/-	-	-	-
A2.7.8.3.7. Order Parts	*							2b/-	-	-	-
A2.7.8.3.8. Review Maintenance Status	*							2b/-	-	-	-
A2.7.8.3.9. Review Equipment Status	*							2b/-	-	-	-
A2.7.8.3.10. Access and print all open events assigned to workcenter								2b/-	-	-	-
A2.7.8.3.11. Job Data Documentation (JDD)								-	-	-	-
A2.7.9. Material Deficiency Reporting System											
A2.7.9.1. Deficiency Reporting System								A	B	-	B
A2.7.9.2. Initiate software improvement/deficiency report								-	-	-	B
A2.7.10. Use aircraft/equipment maintenance forms TR: 00-20-5											
A2.7.10.1. 781A	*							2b	-	-	
A2.7.10.2. 781B								-	-	-	-
A2.7.10.3. 781C								-	-	-	-
A2.7.10.4. 781F								-	-	-	-
A2.7.10.5. 781H								-	-	-	-
A2.7.10.6. 781J								-	-	-	-
A2.7.10.7. 781K	*							2b	-	-	A
A2.7.10.8. 781L								-	-	-	-
A2.7.10.9. 781M								-	-	-	-
A2.7.10.10. AFTO Form 244/245								-	A	-	B
A2.7.10.11. AF Form 939/1492								-	-	-	-
A2.8. SUPERVISION											
A2.8.1. Orient new personnel TR: AFI-36-2108, 36-2201		*						-	-	-	-
A2.8.2. Assign personnel to work assignments TR: AFI 21-101 and applicable command directives		*						-	-	-	-
A2.8.3. Plan work assignments and priorities TR: AFI 21-101 and applicable command directives		*						-	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.8.4. Schedule work assignments and priorities TR: AFI 21-101 and applicable command directives		*						-	-	-	-
A2.8.5. Coordinate work assignments TR: AFI 21-101 and applicable command directives		*						-	-	-	-
A2.8.6. Establish TR: AFI 21-101 and applicable command directives											
A2.8.6.1. Work methods		*						-	-	-	-
A2.8.6.2. Controls		*						-	-	-	-
A2.8.6.3. Performance Standards		*						-	-	-	-
A2.8.7. Evaluate work performance TR: AFI 21-101 and applicable command directives		*						-	-	-	-
A2.8.8. Help resolve technical problems TR: AFIs 36-2101, 36-2201		*						-	-	-	-
A2.8.9. Initiate actions to correct substandard performance TR: AFIs 36-2903, -2907, -3202, -3208		*						-	-	-	-
A2.8.10. Counsel personnel and help resolve individual problems TR: AFP 36-2618		*						-	-	-	-
A2.8.11. Resource Protection		*						-	-	-	-
A2.8.12. Supervise TR: AFMAN 36-2108; AFIs 36-2201, 36-2103											
A2.8.12.1. Maintenance actions		*						-	-	-	B
A2.8.12.2. Inspection actions		*						-	-	-	B
A2.8.13. Analyze											
A2.8.13.1. Maintenance reports and charts								-	-	-	-
A2.8.13.2. Inspection reports and charts								-	-	-	-
A2.8.14. Prepare											
A2.8.14.1. Maintenance inspection reports and charts								-	-	-	-
A2.8.14.2. Organization and functional charts								-	-	-	-
A2.8.15. Justify TR: AFI 21-101 and applicable command directives											
A2.8.15.1. Personnel manning requirements								-	-	-	-
A2.8.15.2. Equipment Authorizations								-	-	-	-
A2.8.16. Recommend policy changes on use of TR: AFI 21-101 and applicable command directives											

Attachment 2

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.8.16.1. Personnel								-	-	-	-
A2.8.16.2. Equipment								-	-	-	-
A2.8.17. Statement of charges TR: DODR 700-14V4, DOD 7200.1								-	-	-	-
A2.8.18. Perform Reports Of Survey TR: DODR 700-14V4, DOD 7200.1								-	-	-	-
A2.8.19. Aircraft Scheduling TR: AFI 21-101. Applicable MAJCOM Instructions											
A2.8.19.1. Status reporting								-	-	-	-
A2.8.19.2. Flying/maintenance plan								-	-	B	-
A2.9. TRAINING TR: AFI 36-2201											
A2.9.1. Evaluate personnel for need of training								-	-	-	-
A2.9.2. Plan and supervise OJT/EST:											
A2.9.2.1. Prepare JQSs (AF Form 797s)								-	-	-	-
A2.9.2.2. Conduct Training		*						-	-	-	-
A2.9.2.3. Counsel Trainees on their progress		*						-	-	-	-
A2.9.3. Career Field Education and Training Plan (CFETP)		*						A	-	-	B
A2.9.4. Specialty Training Standard (STS)		*						A	-	-	B
A2.9.5. Occupational Survey Report (OSR)								-	-	-	B
A2.9.6. Utilization and Training Workshop (U&TW)								-	-	-	B
A2.9.7. Monitor effectiveness of training											
A2.9.7.1. Career knowledge upgrade		*						-	-	-	-
A2.9.7.2. Job proficiency upgrade		*						-	-	-	-
A2.9.7.3. Qualification Training		*						-	-	-	-
A2.9.7.4. Maintain training records		*						-	-	-	B
A2.9.7.5. Evaluate effectiveness of training programs		*						-	-	-	-
A2.9.7.6. Recommend personnel for training		*						-	-	-	-
A2.10. TECHNICAL PUBLICATIONS TR: TO 0-1-01, 00-5-1, 00-5-2, 00-5-15, 00-5-17, 00-5-18, 00-20-1, 00-20-5, 80-00-1											
A2.10.1. Scope and application of the technical order system								A	B	-	-
A2.10.2. Technical Order (TO) Management								-	-	-	B
A2.10.3. Use technical order indexes								-	-	-	-
A2.10.4. Use technical orders								2b	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.10.5. Technical order improvement/ deficiency report								A	B	-	-
A2.10.6. Scope and application of the Computer Program Identification Number (CPIN) system								-	-	-	-
A2.10.7. Use CPIN compendium								-	-	-	-
A2.10.8. Maintain technical order files								-	-	-	-
A2.10.9. Time Compliance TOs								A	-	-	B
A2.11. SUPPLY DISCIPLINE TR: AFI 21-101											
A2.11.1. Supply principles								-	-	-	-
A2.11.2. Property accountability and responsibility								A	B	-	-
A2.11.3. Principles of equipment authorization and management								-	-	-	-
A2.11.4. Special requisitions								-	-	-	-
A2.11.5. Back order verification		*						-	-	-	-
A2.11.6. Use equipment condition tags								1b	-	-	-
A2.11.7. Use issue/turn-in requests								-	-	-	-
A2.11.8. Maintenance Supply Concept								-	-	-	-
A2.11.9. Supply Documents Management								-	-	-	-
A2.11.10. Equipment Account Management								-	-	-	-
A2.11.11. Status of Reports and Training (SORTS)								-	-	-	A
A2.11.12. Priority System		*						-	-	-	B
A2.11.13. Repair Cycle Assets								-	-	-	-
A2.11.14. Standard Base Supply System (SBSS)								-	-	-	-
A2.11.15. FEDLOG								-	-	-	-
A2.11.16. Classified Asset Handling								-	A	-	-
A2.11.17. Land Mobile Radios, Pagers, and Cell Phones								-	-	-	-
A2.11.18. Agile Logistics								-	-	-	-
A2.11.19. Depot level repairable								-	-	-	-
A2.11.20. Use supply products											
A2.11.20.1. DO4 (Daily Document Register)								-	-	-	-
A2.11.20.2. D18 (Priority Monitor List)								-	-	-	-
A2.11.20.3. M30 (Due-out Validation Listing)								-	-	-	-
A2.11.20.4. D23								-	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.12. FUNDAMENTALS ON EQUIPMENT MAINTENANCE TR: Applicable aircraft –1 and –2 series TO											
A2.12.1. Common hand tools								A	-	-	-
A2.12.2. Use torque indicating devices								A	-	-	-
A2.12.3. Use special purpose tools								-	-	-	-
A2.12.4. Protection procedures when handling electrostatic devices								A	B	-	-
A2.12.5. Use of panel sealant								-	-	-	-
A2.12.6. Identify types of corrosion and control techniques								-	-	-	-
A2.12.7. CTK inventory and inspection procedures								A	-	-	-
A2.12.8. Use safetying devices											
A2.12.8.1. Safety wire								-	-	-	-
A2.12.8.2. Shear wire								-	-	-	-
A2.13. FUNDAMENTALS OF AVIONICS SYSTEMS MAINTENANCE TR: Applicable aircraft –1 and –2 series TO											
A2.13.1. Principles								-	-	-	-
A2.13.2. Nuclear hardness maintenance and inspections TR: Applicable system JG-00-1, 1-1A-14								-	-	-	-
A2.13.3. Source of EMI											
A2.13.3.1. Identify								-	A	-	-
A2.13.3.2. Locate								-	-	-	-
A2.13.3.3. Eliminate								-	A	-	-
A2.13.4. Data Bus Principles/Maintenance Practices											
A2.13.4.1. Local Area Networks (OWS-LAN) 802.3								A	B	-	-
A2.13.4.2. MIL-STD-1553A								-	-	-	-
A2.13.4.3. MIL-STD-1553B								A	B	-	-
A2.13.4.4. RS-232								A	B	-	-
A2.13.4.5. RS-422								A	B	-	-
A2.13.4.6. Fiber Optics								A	-	-	-
A2.13.4.7. Troubleshoot data buss								-	-	-	-
A2.14. GENERAL RADAR											
A2.14.1. THEORY OF OPERATION											
A2.14.1.1. Antenna systems								A	B	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.14.1.2. Synthetic Aperture Radar								A	A	-	-
A2.14.2. Frequency Generation											
A2.14.2.1. Operating Frequencies								A	B	-	-
A2.14.2.2. Local Oscillator Frequencies								A	B	-	-
A2.14.2.3. Intermediate Frequencies								A	B	-	-
A2.14.3. Amplification/Transmitters											
A2.14.3.1. Pulsing								A	B	-	-
A2.14.3.2. Continuous Wave (CW)								A	B	-	-
A2.14.3.3. Pulse Repetition Time/ Pulse Repetition Frequency								A	B	-	-
A2.14.4. Receiver Processing											
A2.14.4.1. IF Mixing								A	B	-	-
A2.14.4.2. Analog to Digital Conversions								A	B	-	-
A2.14.4.3. Clutter Processing								A	B	-	-
A2.14.4.4. Pulse Compression/Expansion								A	B	-	-
A2.14.4.5. Doppler Processing								A	B	-	-
A2.14.4.6. Timing and Synchronization								A	B	-	-
A2.15. GENERAL COMPUTER PRINCIPLES											
A2.15.1. Central Processing Unit								A	B	-	-
A2.15.2. Memory Storage Devices								A	B	-	-
A2.15.3. Modem/Handshaker								-	-	-	-
A2.15.4. Power Supply								A	B	-	-
A2.15.5. Controls and Displays								A	B	-	-
A2.16. GLOBAL POSITIONING SYSTEM (GPS)											
A2.16.1. Purpose and Characteristics								A	-	-	-
A2.16.2. Theory of Operation								A	-	-	-
A2.16.3. System Tie-In/Integration								A	-	-	-
A2.17. INERTIAL NAVIGATION SYSTEM											
A2.17.1. Purpose and Characteristics								A	-	-	-
A2.17.2. Theory of Operation								A	-	-	-
A2.17.3. System Tie-In/Integration								A	-	-	-
A2.18. AIRCRAFT WIRING											
A2.18.1. Multiconductor								-	-	-	-
A2.18.2. Coaxial								-	-	-	-

COMMON TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.18.3. Triaxial								-	-	-	-
A2.18.4. Nuclear hardened								-	-	-	-
A2.18.5. Twisted Pair								-	-	-	-
A2.18.6. Single Conductor								-	-	-	-
A2.19. Remove/Install Common Electrical Components											
A2.19.1. Switches								-	-	-	-
A2.19.2. Relays								-	-	-	-
A2.19.3. Circuit breakers								-	-	-	-
A2.19.4. Terminal/modular blocks								-	-	-	-
A2.19.5. Capacitors/resistors/diodes								-	-	-	-
A2.19.6. Lights/light bulbs								-	-	-	-
A2.19.7. Fans/blowers								-	-	-	-
A2.19.8. Transformers								-	-	-	-

SUMMARY OF CHANGES

This section is changed extensively and reflects the conversion of the 2A1X4 (on/off equipment) AFSC to the 2A5X3D on-equipment AFSC. The in-residence 3-level course increases the use of on-equipment forms and the use of CAMS to document on-equipment maintenance. It is expanded to include data bus principles, general computer theory, global positioning systems, and inertial navigation systems. The use of CAMS to document off-equipment maintenance is deleted.

One hundred and eight tasks are added to the 5 and 7-level CDC requirements 92 tasks are deleted and nine tasks have changes to the proficiency code.

Supervisors should review this section in its entirety for additions and deletions.

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
NOTE 1: Asterisks in column 2A and 2B indicate minimum mandatory requirements for upgrade to the applicable skill level. Items identified with an */R are optional for AFRES and ANG.											
NOTE 2: Where AFI 21-101 technical references are quoted, applicable MAJCOM/Multi-command regulations also apply.											
A3.1 Technical Order System TR: TO 00-5-1											
A3.1.1 Airborne Warning and Control System (AWACS)								A	B	-	-
A3.2 SYSTEMS FUNCTIONAL ANALYSIS INCLUDING PURPOSE, OPERATION, SIGNAL PATHS, SIGNAL DISTRIBUTION AND MISSION TIE-IN											
A3.2.1 Aircraft support systems											
A3.2.1.1 E-3 Power requirements TR: TO 1E-3A-2-1-1								A	-	-	-
A3.2.1.2 E-3 Cooling Systems TR: TO 1E-3A-43-2-93-1-2, 1E-3A-43-2-93-3-15 or 1E-3A-43-2-93-3-22								A	-	-	-
A3.2.2 Airborne Warning and Control System (AWACS)											
A3.2.2.1 RSIP											
A3.2.2.1.1 Radar Control and Maintenance Console (RCMC) TR: TO 1E-3A-43-2-93-3-17											
A3.2.2.1.1.1 Screen Hierarchy								-	B	-	-
A3.2.2.1.1.2 Fast Fourier Transformer								-	B	-	-
A3.2.2.1.1.3 Plan Position Indicator								-	B	-	-
A3.2.2.1.1.4 RCDU Controls and Indicators								A	B	-	-
A3.2.2.1.2 Surveillance Radar Computer (SRC) Cabinet TR: TO 1E-3A-43-2-93-3-18, 1E-3A-43-2-93-3-19											
A3.2.2.1.2.1 Radar Interface Adapter Unit (RIAU)								A	B	-	-
A3.2.2.1.2.2 Adaptive Signal Processor (ASP)								A	B	-	-
A3.2.2.1.2.3 Radar Data Processor (RDP)								A	B	-	-
A3.2.2.1.2.3.1 Radar Computer								A	B	-	-
A3.2.2.1.2.3.2 Radar Disk Assembly								A	B	-	-
A3.2.2.1.2.3.3 Radar Power Supplies								A	B	-	-
A3.2.2.1.3 AWACS Surveillance System TR: TO 1E-3A-43-2-93-3-22								A	B		
A3.2.2.1.4 System fault analysis (DATA COMM) TR: TO 1E-3A-43-2-93-3-5								A	B		

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.2.2.1.5 Stable Local Oscillator (STALO) TR: TO 1E-3A-43-2-93-3-23								A	B		
A3.2.2.1.6 Synchronizer TR: TO 1E-3A-43-2-93-3-24								A	B		
A3.2.2.1.7 Transmitter group TR: TO 1E-3A-43-2-93-3-26								A	B		
A3.2.2.1.8 Antenna group TR: TO 1E-3A-43-2-93-3-25								A	B		
A3.2.2.1.9 Analog receiver TR: TO 1E-3A-43-2-93-3-9								A	B		
A3.2.2.1.10 Environmental Control Subsystems TR: TO 1E-3A-43-1-1, 1E-3A-43-2-93-3, 1E-3A-43-2-93-3-25, 1E-3A-43-2-93-3-26								A	B		
A3.2.2.1.11 Maritime Surveillance Capability (MSC) Receiver TR: TO 1E-3A-43-2-93-3-10								A	B		
A3.2.2.1.12 Digital Land Mass Blanker (DLMB) TR: TO 1E-3A-43-2-93-3-27								A	B		
A3.2.3 Interrogator System TR: TO 1E-3A-43-2-93-5											
A3.2.3.1 Interrogation Friend or Foe								A	B	-	-
A3.2.3.2 Antenna group								A	B	-	-
A3.2.4 E17 Cabin Components											
A3.2.4.1 RTDP								A	B	-	-
A3.2.4.2 RT								A	B	-	-
A3.2.4.3 Power supplies								A	B	-	-
A3.2.4.4 RF Transmission Switch								A	B	-	-
A3.2.4.5 OBTM&M								A	B	-	-
A3.3 SUPPORT EQUIPMENT TR: APPLICABLE 31 & 33 Series TO											
A3.3.1 General Purpose Support Equipment											
A3.3.1.1 Principles of support equipment											
A3.3.1.1.1 Purpose								A	-	-	-
A3.3.1.1.2 Characteristics								-	-	-	-
A3.3.2 Common test equipment											
A3.3.2.1 Milliohmmeters								A	B	-	-
A3.3.2.2 Power meters											

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.3.2.2.1 Perform measurements								-	-	-	-
A3.3.2.2.2 Perform calculations								-	-	-	-
A3.3.2.3 Decade resister box								-	-	-	-
A3.3.2.4 Megaohmmeter								-	B	-	-
A3.3.2.5 Sweep Oscillator								-	-	-	-
A3.3.2.6 X-Y Recorder								-	-	-	-
A3.3.2.7 Network Analyzer								-	-	-	-
A3.3.2.8 1553 Bus Analyzer								-	-	-	-
A3.3.2.9 Use Frequency Counter								-	-	-	-
A3.3.2.10 Use Reflectometer								-	-	-	-
A3.3.2.11 Oscilloscope								-	-	-	-
A3.3.2.12 Spectrum Analyzer								-	-	-	-
A3.3.2.13 Logic Analyzer								-	A	-	-
A3.3.3 Airborne Warning and Control Systems											
A3.3.3.1 Support equipment TR: 1E-3A-43-2-93 Series TO											
A3.3.3.1.1 Analog Receiver Test Set (RIB) TR: TO 33D7-17-60-1								-	-	-	-
A3.3.3.1.2 Radar Test Set AN/UPM-155 TR: TO 33A1-3-426-3, 12P4-1A-122								-	-	-	-
A3.3.3.1.3 Radar Test Set AN/APM-401 TR: TO 33D7-36-35-1								-	-	-	-
A3.3.3.1.4 Antenna Control Drive Test Set AN/APM-402 TR: TO 33D7-47-55-1								A	A	-	-
A3.3.3.1.5 Air Pressure Warning Alarm System SDU-34 TR: TO 1E-3A-2-1-1								A	-	-	-
A3.3.3.1.6 Ion Pump Power Supplies TR: TO 1E-3A-43-2-93-3, 1E-3A-43-2-93-3-13 or 1E-3A-43-2-93-3-26								A	-	-	-
A3.3.3.1.7 Monorail Assembly TR: TO 1E-3A-43-2-93-3								A	-	-	-
A3.3.3.1.8 WATTS Test Box TR: TO 1E-3A-2-93-4								-	-	-	-
A3.3.3.1.9 Ground Power TR: TO 1E-3A-2-1-1											
A3.3.3.1.9.1 TRIELECTRON								-	-	-	-
A3.3.3.1.9.2 INET								-	-	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.3.3.1.10 Environmental Systems TR: TO 1E-3A-2-1-1											
A3.3.3.1.10.1 Air Conditioning Equipment (ACE) Cart								-	-	-	-
A3.3.3.1.10.2 Liquid Cooling System (LCS) Cart								-	-	-	-
A3.3.3.1.10.3 SF-6											
A3.3.3.1.10.3.1 SF-6 Ground Cart TR: TO 1E-3A-43-2-93-3								A	-	-	-
A3.3.3.1.10.3.2 SF-6 Transfer Pump								-	-	-	-
A3.3.3.1.10.3.3 Service SF-6 bottle								-	-	-	-
A3.3.3.1.10.3.4 Vacuum Pump TR: TO 1E-3A-43-2-93-3								A	-	-	-
A3.3.3.1.10.3.5 Nitrogen Cart TR: TO 12P2-APY 1-2-1, 35D3-6-33-13								A	-	-	-
A3.3.3.1.10.3.6 Service SF-6 system TR: TO 1E-3A-43-2-93-3								-	-	-	-
A3.3.3.1.10.4 FC-77											
A3.3.3.1.10.4.1 FC-77 Servicing Cart TR: TO 1E-3A-43-2-93-3								A	-	-	-
A3.3.3.1.10.4.2 FC-77 Top-Off Bottle TR: TO 1E-3A-43-2-93-3								-	-	-	-
A3.3.3.1.10.4.3 Service antenna pedestal FC-77 TR: TO 1E-3A-43-2-93-3								-	-	-	-
A3.4 Airborne Warning and Control System TR: TO 00-25-234, 12P2-2APY1-2-1, 1E-3A-2-110-93-1, 1E-3A-43-2-110-93-2, and 1E-3A-43-2-110-93-3											
A3.4.1 Wiring diagrams								A	A	-	-
A3.4.2 Wire list								-	A	-	-
A3.4.3 Perform Wire Wrapping								-	A	-	-
A3.4.4 Replace Pickle Forks								-	A	-	-
A3.4.5 Isolate faults by											
A3.4.5.1 Using Visual checks	*							-	B	-	-
A3.4.5.2 Comparing test results with TO	*							-	B	-	-
A3.4.5.3 Performing Symptoms analysis using TO diagrams	*							-	B	-	-
A3.4.5.4 Tracing Signals	*							-	B	-	-
A3.4.5.5 Performing Component substitution	*							-	B	-	-
A3.4.5.6 Performing Continuity Checks	*							-	B	-	-

Attachment 3

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.4.5.7 Perform Rotary Joint Brush Block Inspection TR: TO 1E-3A-43-2-93-3								-	-	-	-
A3.4.5.8 Rotate the rotodome TR: TO 1E-3A-2-7								-	-	-	-
A3.5 ORGANIZATIONAL MAINTENANCE											
A3.5.1 Airborne Warning and Control Systems TR: AFI 21-101, Applicable CAT 00 & 1 TO, AFOSH 127-66, ACCI 21-166											
A3.5.1.1 Replace aircraft wiring harnesses											
A3.5.1.1.1 AN/APY-1 or APY-2 Radar Set								-	-	-	-
A3.5.1.1.2 AN/APX-103 Interrogator System								-	-	-	-
A3.5.1.2 Enter and Exit TR: TO 1E-3A-43-2-93-3											
A3.5.1.2.1 Forward/AFT lower lobe								-	-	-	-
A3.5.1.2.2 Antenna Pedestal								-	-	-	-
A3.5.1.2.3 Rotodome interior panels								-	-	-	-
A3.5.2 Perform In-flight Maintenance Spares (IFMS) Inventory TR: TO 1E-3A-21								-	-	-	-
A3.6 MAINTAIN INSTALLED EQUIPMENT											
A3.6.1 RSIP											
A3.6.1.1 RSIP Radar – Turn on procedures	*							-	B	-	-
A3.6.1.2 Interpret messages and verify performance	*							-	B	-	-
A3.6.1.3 Mask Continuously Monitored Parameters	*							-	B	-	-
A3.6.1.4 Inhibit Automatic Testing	*							-	B	-	-
A3.6.1.5 Reconfigure	*							-	B	-	-
A3.6.1.6 RSIP Memory Functions	*							-	B	-	-
A3.6.1.7 RSIP Special Testing	*	*						-	B	-	-
A3.6.1.8 Initiate/Perform Individual Special Tests	*	*						-	B	-	-
A3.6.1.9 Wake-up	*							-	B	-	-
A3.6.1.10 RCA	*							-	B	-	-
A3.6.1.11 Initiate / Perform Radar Test	*							-	B	-	-
A3.6.1.12 Configuration Evaluation	*							-	B	-	-
A3.6.1.13 Non Interruptive Testing	*							-	B	-	-
A3.6.1.14 Normal Power Down Procedures	*							-	B	-	-
A3.6.1.15 Emergency Power Down Procedures	*							-	B	-	-

Attachment 3

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.6.2 RSIP TR: TO 1E-3A-43-2-93-3-20											
A3.6.2.1 Solenoid Current	*							-	B	-	-
A3.6.2.2 Beam Voltage	*							-	B	-	-
A3.6.2.3 Collector Current	*							-	B	-	-
A3.6.2.4 KPA Burn In		*						-	B	-	-
A3.6.2.5 Average Power Calibration	*							-	B	-	-
A3.6.2.6 TAC Peak Power	*							-	B	-	-
A3.6.2.7 TAC Curve Calibration	*							-	B	-	-
A3.6.2.8 Phase Compensation Calibration	*							-	B	-	-
A3.6.2.9 Reflected Power Calibration	*							-	B	-	-
A3.6.2.10 Transmitter Peak Power Calibration	*							-	B	-	-
A3.6.3 Manual Calibration											
A3.6.3.1 RSIP											
A3.6.3.1.1 BIT Target Generator Calibrations								-	A	-	-
A3.6.3.1.2 Path Insertion								-	B	-	-
A3.6.3.1.3 10db Loss Measurement								-	B	-	-
A3.6.3.1.4 40db Loss Measurement								-	B	-	-
A3.6.3.1.5 VCA Loss Measurement								-	B	-	-
A3.6.3.1.6 Power Correction								-	B	-	-
A3.6.3.1.7 Target Power Adjustment								-	B	-	-
A3.6.3.1.8 Noise Diode Calibration											
A3.6.3.1.8.1 Line Loss								-	B	-	-
A3.6.3.1.8.2 Noise Measurement								-	B	-	-
A3.6.3.1.8.3 Noise Diode Calibration								-	B	-	-
A3.6.3.1.9 Analog to Digital Offset Adjustment								-	A	-	-
A3.6.3.1.10 Spectrum Generator 60MHz Target Adjustment								-	-	-	-
A3.6.3.1.11 BTG Target 2 Center Frequency Adjustment								-	-	-	-
A3.6.3.1.12 BTG Cal – Receiver Gain Adjustments								-	-	-	-
A3.6.3.1.13 BTH IF Test and Adjustment								-	-	-	-
A3.6.3.1.14 F ₀ Leakage Check								-	-	-	-
A3.6.3.1.15 TAC Thermal Assembly Adjustments								-	-	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.6.3.1.16 RCDU Internal Adjustments								-	-	-	-
A3.6.4 Perform Radar Fault Isolation Test (FIT)											
A3.6.4.1 RSIP											
A3.6.4.1.1 RDP	*							-	B	-	-
A3.6.4.1.2 Unit	*							-	B	-	-
A3.6.4.1.3 System	*							-	B	-	-
A3.6.5 Perform fault analysis											
A3.6.5.1 RSIP Radar System TR: TO 1E-3A-43-2-93 Series											
A3.6.5.1.1 RDP								-	B	-	-
A3.6.5.1.2 RIAU								-	B	-	-
A3.6.5.1.3 RCMC								-	B	-	-
A3.6.5.1.4 STALO								-	B	-	-
A3.6.5.1.5 Synchronizer								-	B	-	-
A3.6.5.1.6 Analog Receiver								-	B	-	-
A3.6.5.1.7 ASP								-	B	-	-
A3.6.5.1.8 Rotodome								-	B	-	-
A3.6.5.1.9 Transmitter								-	B	-	-
A3.6.5.1.10 Maritime Receiver								-	B	-	-
A3.6.5.1.11 DLMB								-	B	-	-
A3.6.5.2 Interrogator System TR: TO 1E-3A-43-2-93-5											
A3.6.5.2.1 Steering								-	B	-	-
A3.6.5.2.2 RF								-	B	-	-
A3.6.5.2.3 OBTM&M								A	B	-	-
A3.6.5.2.4 Perform operational checkout	*							-	B	-	-
A3.6.6. Maintain System M TR: TO 1E-3A-2-93-4											
A3.6.6.1 Perform Operational Checkout								-	-	-	-
A3.6.7 RSIP Software Manipulation TR: TO 1E-3A-43-2-93-3-20, 1E-3A-43-2-93-3-21											
A3.6.7.1 Reset and Recycle Control								-	B	-	-
A3.6.7.2 Set Disk Function								-	-	-	-
A3.6.7.3 RSIP Recording Function								-	-	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.6.7.4 Edit Calibration Data								-	B	-	-
A3.6.7.5 Copy RIAU EEPROM Data								-	B	-	-
A3.6.7.6 RSIP Transmitter Ground Radiation Procedure								A	B	-	-
A3.6.7.7 Transfer of radar test targets across the interface								A	B	-	-
A3.6.8 RSIP Use Console Mode TR: TO 1E-3A-43-2-93-3-21											
A3.6.8.1 Enter / Exit Console Mode								-	B	-	-
A3.6.8.2 Mount / Dismount Disk								-	B	-	-
A3.6.8.3 Quicklook Testing								-	B	-	-
A3.6.8.4 RDP File Configuration								-	B	-	-
A3.6.8.5 Poll RDP Circuits								-	B	-	-
A3.6.8.6 Disk Utilities								-	B	-	-
A3.6.8.7 EEPROM Maintenance								-	B	-	-
A3.7 PERFORM POWER-OFF MAINTENANCE											
A3.7.1 Airborne Warning and Control Systems TR: TO 1E-3A-43-2-93-3											
A3.7.1.1 Replace AFT Lower Compartment Line Replaceable Units											
A3.7.1.1.1 Power distribution unit								-	-	-	-
A3.7.1.1.2 Protection and control unit								-	-	-	-
A3.7.1.1.3 Low voltage auxiliary unit								-	-	-	-
A3.7.1.1.4 EMI filter								-	-	-	-
A3.7.1.1.5 High voltage transformer								-	-	-	-
A3.7.1.1.6 High voltage filter								-	-	-	-
A3.7.1.1.7 High voltage regulator								-	-	-	-
A3.7.1.1.8 High voltage auxiliary unit								-	-	-	-
A3.7.1.1.9 KPA solenoid								-	-	-	-
A3.7.1.1.10 Solenoid power supply								-	-	-	-
A3.7.1.1.11 Floating deck pulser								-	-	-	-
A3.7.1.1.12 Driver								-	-	-	-
A3.7.1.1.13 RF sample unit								-	-	-	-
A3.7.1.1.14 Microwave assembly								-	-	-	-
A3.7.1.1.15 Transmit angle control								-	-	-	-
A3.7.1.1.16 Ground deck pulser								-	-	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.7.1.1.17 Pre-driver								-	-	-	-
A3.7.1.1.18 Level set attenuator								-	-	-	-
A3.7.1.1.19 Ion pump power supply								-	-	-	-
A3.7.1.1.20 SF-6 supply system								-	-	-	-
A3.7.1.1.21 Radar liquid coolant system								-	-	-	-
A3.7.1.2 Replace mission crew compartment line replaceable units											
A3.7.1.2.1 Radar analog enclosure											
A3.7.1.2.1.1 Analog receiver								-	-	-	-
A3.7.1.2.1.2 STALO group								-	-	-	-
A3.7.1.2.1.3 Synchronizer								-	-	-	-
A3.7.1.2.2 Radar digital enclosure											
A3.7.1.2.3 Maritime enclosure								-	-	-	-
A3.7.1.2.4 Radar Control and Maintenance Panel (RCMP)								-	-	-	-
A3.7.1.2.5 Dehydrator								-	-	-	-
A3.7.1.2.6 Waveguide								-	-	-	-
A3.7.1.3 Replace antenna pedestal line replaceable units TR: TO 1E-3A-43-2-93-3											
A3.7.1.3.1 RF manifold								-	-	-	-
A3.7.1.3.2 Phase shifter driver unit								-	-	-	-
A3.7.1.3.3 Microwave receiver								-	-	-	-
A3.7.1.3.4 Phase shifter control unit								-	-	-	-
A3.7.1.3.5 Thermal stabilization unit								-	-	-	-
A3.7.1.3.6 Rotary joint								-	-	-	-
A3.7.1.3.7 Waveguide								-	-	-	-
A3.7.1.4 Replace Forward Lower Lobe Components TR: TO 1E-3A-2-24-1											
A3.7.1.4.1 R933 Relay								-	-	-	-
A3.7.1.4.2 M1029 Relay								-	-	-	-
A3.7.1.5 Replace Interrogator Systems LRUs TR: TO 1E-3A-43-2-93-5											
A3.7.1.5.1 Receiver Transmitter								-	-	-	-
A3.7.1.5.2 Radar target data processor								-	-	-	-
A3.7.1.5.3 Power supply								-	-	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.7.1.5.4 Interrogator Computer								-	-	-	-
A3.7.1.5.5 Transmission line switch								-	-	-	-
A3.7.1.6 Antenna group											
A3.7.1.6.1 Control								-	-	-	-
A3.7.1.6.2 Drive								-	-	-	-
A3.7.1.6.3 Power divider								-	-	-	-
A3.7.1.6.4 RF Detector								-	-	-	-
A3.7.1.6.5 Transmission line coupler								-	-	-	-
A3.8 INTERMEDIATE MAINTENANCE											
A3.8.1 Bench check interrogator LRU TR: TO 1E-3A-43-2-93-5, 12P4-2A-122											
A3.8.1.1 Receiver-Transmitter								-	-	-	-
A3.8.1.2 ISLS SW								-	-	-	-
A3.8.1.3 Low Voltage Power Supply (LVPS)								-	-	-	-
A3.8.1.4 Video processor								-	-	-	-
A3.8.1.5 Antenna control								-	-	-	-
A3.8.1.6 Antenna drive								-	-	-	-
A3.8.1.7 Power dividers								-	-	-	-
A3.8.1.8 RF detector								-	-	-	-
A3.8.1.9 Transmission line switch								-	-	-	-
A3.8.2 Repair Interrogator LRUs TR: TO 12P4-2A-122-1, -122, -183											
A3.8.2.1 Receiver-Transmitter								-	-	-	-
A3.8.2.2 Antenna control								-	-	-	-
A3.8.2.3 Antenna drive								-	-	-	-
A3.8.2.4 ISLS switch								-	-	-	-
A3.8.2.5 Low voltage power supply								-	-	-	-
A3.8.2.6 Transmitter plate								-	-	-	-
A3.8.3 Special Support Equipment											
A3.8.3.1 Principles of operation											
A3.8.3.1.1 Spectrum Analyzer TR: TO 33D7-10-147-1, 33D7-10-154-1								-	A	-	-
A3.8.3.1.1 Analog receiver test set (RIB) TR: TO 33D7-17-60-1								-	A	-	-

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.3.1.1 Radar test set AN/APM-401 TR: TO 33D7-36-35-1, 33D7-36-35-1-1								-	A	-	-
A3.8.3.1.1. PROM Programmer TR: TO 1E-3A-43-2-93-3-20								-	-	-	-
A3.8.3.1.1 Antenna control drive test AN/APM402 TR: TO 33D7-47-55-1, 1E-3A-43-2-93-2								-	A	-	-
A3.8.3.2 Isolate malfunctions											
A3.8.3.2.1 Spectrum analyzer TR: TO 33D7-10-147-1, 33D7-10-154-1								-	-	-	-
A3.8.3.2.2 Analog receiver test set (RIB) TR: TO 33D7-17-60-1								-	-	-	-
A3.8.3.2.3 Radar test set AN/APM-401 TR: TO 33D7-36-35-1, 33D7-36-35-1-1								-	-	-	-
A3.8.3.2.4 PROM Programmer								-	-	-	-
A3.8.3.2.5 Antenna control drive test set AN/APM402 TR: TO 33D7-47-55-1, 1E-3A-43-2-93-5								-	-	-	-
A3.8.4 Klystron and Solenoid Assembly TR: TO 12P2-2APY1-2-1											
A3.8.4.1 Build up Klystron and Solenoid Assembly		*						-	-	-	-
A3.8.5 AUTOMATIC TRANSMITTER TEST SET (ATTS) AN/APM-478 TR: TO 33D7-29-85-1, 33D7-44-329-2, -12											
A3.8.5.1 Environmental Controls and Indicators											
A3.8.5.2 Liquid Cooling Sys Operation and Monitoring								-	-	-	-
A3.8.5.3 Emergency Shutdown								-	-	-	-
A3.8.5.4 Shutoff Valves								-	-	-	-
A3.8.5.5 Cold Weather Preparation and Operation								-	-	-	-
A3.8.5.6 Sulfur Hexafluoride (SF.6)											
A3.8.5.6.1 Bottle Replacement								-	-	-	-
A3.8.5.6.2 Leak Detection								-	-	-	-
A3.8.5.6.3 Pressurization Check								-	-	-	-
A3.8.5.6.4 Antenna Pressurization Substitution (230lb Bottle)								-	-	-	-
A3.8.5.7 Environmental Cooling											
A3.8.5.7.1 Control Panel Operation								-	-	-	-
A3.8.5.8 Operate Transmitter HMU AN/FPM.40 Using ATTS AN/APM.478											

AWACS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.5.8.1 Turn On								-	-	-	-
A3.8.5.8.2 Shutdown								-	-	-	-
A3.8.5.8.3 Emergency Shutdown TR: TO 33D7.44.329.2, AFOSH 127.45								-	-	-	-
A3.8.5.8.4 RDC Simulator Panel								-	-	-	-
A3.8.5.8.5 Operational Self Test								-	-	-	-
A3.8.5.8.6 Interface Check								-	-	-	-
A3.8.5.8.7 Monitor Test								-	-	-	-
A3.8.5.8.8 Harmonization								-	-	-	-
A3.8.5.8.9 Normalization								-	-	-	-
A3.8.5.8.10 KPA Burn In (Automatic) and Documentation								-	-	-	-
A3.8.5.8.11 KPA Burn In (Manual) and Documentation								-	-	-	-
A3.8.5.8.12 LRU Retest and Documentation TR: TO 33D7.44.329.12								-	-	-	-
A3.8.5.9 Perform Power Off Maintenance TR: TO 33D7-44-329-2											
A3.8.5.9.1 Lockout and Tag out Procedures								-	-	-	-
A3.8.5.9.2 Remove and Install High Voltage Components								-	-	-	-
A3.8.5.9.3 High Voltage Cable Cleaning and Inspection								-	-	-	-
A3.8.5.9.4 Remove and Install High Power Microwave Components								-	-	-	-
A3.8.5.9.5 Remove and Install RF Components								-	-	-	-
A3.8.5.9.6 Remove and Install Protection and Control Units								-	-	-	-

SUMMARY OF CHANGES

This section is changed extensively. The use of special codes to identify a specific aircraft is deleted. This attachment contains the tasks for the E-3 (AWACS) aircraft and includes pre RSIP and post RSIP tasks.

Supervisors should review this section in its entirety for additions and deletions.

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
NOTE 1: Asterisks in column 2A and 2B indicate minimum mandatory requirements for upgrade to the applicable skill level. Items identified with an */R are optional for AFRES and ANG.											
NOTE 2: Where AFI 21-101 technical references are quoted, applicable MAJCOM/Multi-command regulations also apply.											
A4.1. JSTARS TECHNICAL ORDER SYSTEM TR: PHOENIX, 1E-8C-12											
A4.1.1 PHOENIX System								A	A	-	-
A4.1.2 Use PHOENIX	*							2b	-	-	-
A4.1.3 Technical Order Deficiency Reporting TR: TO 00-5-2								A	-	-	-
A4.1.4 Perform Technical Order Verifications TR: TO 00-5-3, TM-86-01								-	-	-	-
A4.2 SYSTEMS FUNCTIONAL ANALYSIS INCLUDING PURPOSE, OPERATION, SIGNAL PATHS, SIGNAL DISTRIBUTION AND MISSION TIE-IN											
A4.2.1 Aircraft support systems											
A4.2.1.1 E-8 Power Requirements TR: TO 1E-8C-12, 0500 Series								A	-	-	-
A4.2.1.2 E-8 Environmental Control System TR: TO 1E-8C-12, 2100 Series								A	-	-	-
A4.2.2 Joint Surveillance Target Attack Radar System (JSTARS) Surveillance System TR: TO 1E-8C-12, 9900 Series											
A4.2.2.1 JSTARS Surveillance System								A	B	-	-
A4.2.2.2 Data Processing Subsystem											
A4.2.2.2.1 System Monitor and Control (SM&C) VAX 866 Main Chassis								-	-	-	-
A4.2.2.2.1.1 System Monitor and Control (SM&C) VAX 861 Expansion Chassis								-	-	-	-
A4.2.2.2.2 General Purpose Computer (GPC) VAX 866 Main Chassis								-	-	-	-
A4.2.2.2.2.1 General Purpose Computer (GPC) VAX 861 Expansion Chassis								-	-	-	-
A4.2.2.2.3 Data Interfaces (LANs and Buses)								A	B	-	-
A4.2.2.2.4 Versatile Media Mass Memory (VM3)								-	-	-	-
A4.2.2.2.5 Removable Transportable Memory Module (RTMM)								-	-	-	-
A4.2.2.2.6 Power Interlock Control Junction Box (PIC JB)								A	B	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.2.2.2.7 System Test Panel Junction Box (STP JB)								A	B	-	-
A4.2.2.2.8 System Monitor and Control Junction Box (SM&C JB)								A	B	-	-
A4.2.2.2.9 Serial Data Switching Unit Junction Box (SDSU JB)								-	-	-	-
A4.2.2.2.10 Central Computer								A	B	-	-
A4.2.2.2.10.1 Central Computer Mass Storage Device (CCMSD)								A	B	-	-
A4.2.2.2.10.2 Central Computer Versa Media Europe (CCVME)								A	B	-	-
A4.2.2.2.11 LAN Hub (Gigaswitch)								A	B	-	-
A4.2.2.2.12 LAN Bridge								A	B	-	-
A4.2.2.2.13 Serial Data Hub								A	B	-	-
A4.2.2.2.14 Fiber Distributed Data Interface (FDDI)								A	B	-	-
A4.2.2.2.15 FWD/AFT Fiber Optic Patch Panel								A	B	-	-
A4.2.2.3 Data Display Subsystem											
A4.2.2.3.1 Advanced Digital Display Processor (ADDP)								-	-	-	-
A4.2.2.3.2 Display Unit								A	B	-	-
A4.2.2.3.3 Operator Work Station Embedded Disk (OED)								-	-	-	-
A4.2.2.3.4 Data Entry Device								-	-	-	-
A4.2.2.3.5 OWS Data Processor								A	B	-	-
A4.2.2.3.6 OWS Mass Storage Device (MSD)								A	B	-	-
A4.2.2.3.7 Data Entry Device (CRP)								A	B	-	-
A4.2.2.4 Data Recording Subsystem											
A4.2.2.4.1 Printer								A	A	-	-
A4.2.2.5 Radar Subsystem											
A4.2.2.5.1 Radar Airborne Signal Processor (RASP)								A	B	-	-
A4.2.2.5.2 Radar Control Unit (RCU)								A	B	-	-
A4.2.2.5.3 Receiver Analog to Digital Converter (RAD)								A	B	-	-
A4.2.2.5.4 Exciter (XCTR)								A	B	-	-
A4.2.2.5.5 Transmitters (XMTR)								A	B	-	-
A4.2.2.5.6 High Power Combiner (HPC)								A	B	-	-
A4.2.2.5.7 Antenna Group								A	B	-	-
A4.2.2.5.8 Signal Pre-Processor (SPP)								-	-	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.2.2.5.9 Pulse Compression Unit (PCU)								-	-	-	-
A4.2.2.5.10 Programmable Signal Processor (PSP)								-	-	-	-
A4.2.2.5.11 Inertial Measurement Group (IMG)								A	B	-	-
A4.2.2.5.12 Antenna Servo Electronics (ASE)								A	B	-	-
A4.2.2.6 BIT Theory of Operation											
A4.2.2.6.1 Operational Readiness Test (ORT)								A	B	-	-
A4.2.2.6.2 On-Line Testing								A	B	-	-
A4.2.2.6.3 Diagnostic Test								-	-	-	-
A4.2.2.6.4 Diagnostic Test (CRP)								A	B	-	-
A4.3 SUPPORT EQUIPMENT TR: APPLICABLE 31 & 33 Series TO											
A4.3.1 General Purpose Support Equipment											
A4.3.1.1 Principles of Support Equipment											
A4.3.1.1.1 Purpose								-	-	-	-
A4.3.1.1.2 Characteristics								-	-	-	-
A4.3.1.2 Common Test Equipment											
A4.3.1.2.1 Milliohmeters								-	-	-	-
A4.3.1.2.2 Power Meter								-	-	-	-
A4.3.1.2.3 Oscilloscope								-	-	-	-
A4.3.1.2.4 Spectrum Analyzer								-	B	-	-
A4.3.1.2.5 Radio Frequency Transmission Line Test Set (RFTLTS)								-	B	-	-
A4.3.1.2.6 Network/LAN Analyzer								-	B	-	-
A4.3.1.2.7 1553 Bus Analyzer								-	B	-	-
A4.3.1.2.8 Frequency Counter								-	-	-	-
A4.3.1.2.9 Time Domain Reflectometer (TDR)								-	B	-	-
A4.3.1.2.10 Multimeter								-	-	-	-
A4.3.2 Use Special Purpose Support Equipment TR: TO 1E-8C-12, 99JG, 35D5-4-11-1											
A4.3.2.1 Antenna Handling Unit								-	-	-	-
A4.3.2.2 Antenna Lifting Beam								-	-	-	-
A4.3.2.3 Antenna Stanchion								-	-	-	-
A4.3.2.4 Antenna Array Cover Set								-	-	-	-
A4.3.2.5 Line Replaceable Unit (LRU) Handling Dolly								-	-	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.3.2.6 Monorail and Handling Sling								-	-	-	-
A4.3.2.7 Nitrogen Cart								-	-	-	-
A4.3.2.8 Air Conditioning Equipment (ACE) Cart								-	-	-	-
A4.3.2.9 Trielectron								-	-	-	-
A4.3.3 Accomplish Routine Maintenance on Support equipment TR: TO 35D5-4-11-1								-	-	-	-
A4.4 COMMON O-LEVEL MAINTENANCE TR: 00-25-234, 1E-8C-12, 99WD and 110 Series TO											
A4.4.1 Schematic and Wiring Diagrams								A	A	-	-
A4.4.2 Equipment List								-	-	-	-
A4.5 MAINTAIN INSTALLED EQUIPMENT											
A4.5.1 Operate Surveillance System TR: 1E-8C-12, 99JG Series											
A4.5.1.1 Initialize Systems											
A4.5.1.1.1 Data Processing Subsystem	*							-	-	-	-
A4.5.1.1.2 Data Display Subsystem	*							-	-	-	-
A4.5.1.1.3 Radar Subsystem	*							-	-	-	-
A4.5.1.2 Monitor and Control System Operation											
A4.5.1.2.1 Operation of Radar Control Unit (RCU) Monitor TR: TO 1E-8C-12, 99FI Series	*							-	-	-	-
A4.5.1.2.2 Operation of Performance Monitoring (PM) Background TR: TO 1E-8C-12, 99FI Series	*							-	-	-	-
A4.5.1.2.3 Operation of Operation and Control Operational (OCO) Task Monitor TR: TO 1E-8C-12, 99FI Series	*							-	-	-	-
A4.5.1.3 Data Processing Subsystem (CRP)								-	-	-	-
A4.5.1.4 Data Display Subsystem (CRP)								-	-	-	-
A4.5.1.5 Radar Subsystem (CRP)								-	-	-	-
A4.5.1.6 Configure Equipment for Operational Use								-	-	-	-
A4.5.1.7 Perform Ground Radiation Procedures								-	-	-	-
A4.5.1.8 Align Display units								-	-	-	-
A4.5.1.9 Terminate PME System operation	*							-	-	-	-
A4.5.1.10 Radar Service Requests											
A4.5.1.10.1 Radar Referenced Coverage Area	*							-	B	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.5.1.10.2 Ground Referenced Coverage Area	*							-	B	-	-
A4.5.1.10.3 Sector Search	*							-	B	-	-
A4.5.1.10.4 Synthetic Aperture Radar	*							-	B	-	-
A4.5.1.10.5 Antenna Patterns	*							-	B	-	-
A4.5.2 Initiate Surveillance System Diagnostic Test TR: TO 1E-8C-12, 99JG, 99FR, 99FI Series											
A4.5.2.1 Data Processing Subsystem								-	-	-	-
A4.5.2.1.1 General Purpose Computer (GPC)								-	-	-	-
A4.5.2.1.2 System Monitor & Control (SM&C)								-	-	-	-
A4.5.2.2 Data Display Subsystem								-	-	-	-
A4.5.2.3 Data Processing Subsystem (CRP)											
A4.5.2.3.1 Central Computer (CC)	*							-	B	-	-
A4.5.2.4 Data Display Subsystem (CRP)											
A4.5.2.4.1 Operator Work Station Data Processor (OWSDP)	*							-	B	-	-
A4.5.2.5 Radar Subsystem											
A4.5.2.5.1 RSG	*							-	-	-	-
A4.5.2.5.2 RSE	*							-	-	-	-
A4.5.2.5.3 RCU	*							-	-	-	-
A4.5.2.5.4 PSP								-	-	-	-
A4.5.2.6 Radar Subsystem (CRP)											
A4.5.2.6.1 RSG	*							-	B	-	-
A4.5.2.6.2 RSE	*							-	B	-	-
A4.5.2.6.3 RCU	*							-	B	-	-
A4.5.2.6.4 RASP	*							-	B	-	-
A4.5.3 Initiate Surveillance System Operational Readiness Test TR: TO 1E-8C-12, 99JG, 99FI, 99FR Series											
A4.5.3.1 Data Processing Subsystem								-	-	-	-
A4.5.3.2 Data Display Subsystem								-	-	-	-
A4.5.3.3 Data Processing Subsystem (CRP)								-	-	-	-
A4.5.3.4 Data Display Subsystem (CRP)								-	-	-	-
A4.5.3.5 Radar Subsystem											
A4.5.3.5.1 RASP								-	-	-	-
A4.5.4 Interpret Test Results											

Attachment 4

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
TR: TO 1E-8C-12, 99JG, 99FI, 99 FR Series											
A4.5.4.1 Operational Readiness Test (ORT)	*							-	A	-	-
A4.5.4.2 Online Tests	*							-	A	-	-
A4.5.4.3 Diagnostic Tests	*							-	A	-	-
A4.6 Isolate Malfunctions Using: TR: TO 1E-8C-12											
A4.6.1 Operational Readiness Test (ORT) Results								-	-	-	-
A4.6.2 On-line Testing Results								-	-	-	-
A4.6.3 Diagnostic Testing Results								-	-	-	-
A4.6.4 Schematics and Wiring Diagrams TR: TO 1E-8C-12, 99SD Series								-	-	-	-
A4.6.5 Perform Visual checks								-	B	-	-
A4.6.6 Compare Test Results With TO TR: TO 1E-8C-12, 99-JG Series								-	-	-	-
A4.6.7 Perform Symptoms Analysis Using TO Diagrams TR: TO 1E-8C-12, 99SD Series								-	-	-	-
A4.6.8 Signal Tracing								-	-	-	-
A4.6.9 Perform Component Substitution TR: TO 1E-8C-12, 99JG Series								-	-	-	-
A4.6.10 Perform Continuity Checks								-	-	-	-
A4.7 ORGANIZATIONAL MAINTENANCE (JSTARS) SURVEILLANCE SYSTEM TR: TO 1E-8C-12, 00GS, 99JG, 99WD Series											
A4.7.1 Replace Aircraft Wiring Harnesses											
A4.7.1.1 Data Processing Subsystem								-	-	-	-
A4.7.1.2 Data Display Subsystem								-	-	-	-
A4.7.1.3 Radar Subsystem								-	-	-	-
A4.7.2 Memory Load and Verify / Declassification Procedures											
A4.7.2.1 Operation of Memory Load and Verify (MLV) Utility											
A4.7.2.1.1 Radar Sensor Embedded (RSE) MLV Utility TR: TO 1E-8C 12, 00GS	*							-	B	-	-
A4.7.2.1.2 Radar Control Unit (RCU) MLV Utility TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.2.1.3 Pulse Compression Unit (PCU) MLV Utility TR: TO 1E-8C-12, 00GS	*							-	-	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.7.2.1.4 RASP (CRP) TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.2.2 Declassification Procedures TR: TO 1E-8C-12, 00GS											
A4.7.2.2.1 RSE OPS-113a TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.2.2.2 RCU OPS-114a TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.2.2.3 PCU OPS-115a TR: TO 1E-8C-12, 00GS								-	-	-	-
A4.7.2.2.4 RASP OPS-199a TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.2.2.5 General Equipment OPS-118a TR: TO 1E-8C-12, 00GS	*							-	B	-	-
A4.7.3 Perform Encoder Alignment Procedure TR: TO 1E-8C-12, 00GS								-	-	-	-
A4.7.4 Failure Isolation to Associated Aircraft Systems								-	-	-	-
A4.7.5 Enter and Exit Forward Lower Lobe								-	-	-	-
A4.7.6 Access and Secure Surveillance Radome								-	-	-	-
A4.7.7 Landing Gear Strut Inflation TR: TO 1E-8C-12, 05JG Series								-	-	-	-
A4.8 PERFORM POWER-OFF MAINTENANCE TR: TO 1E-8C-12, 99JG, 53 JG Series											
A4.8.1 Replace Data Processing Subsystem Line replaceable units/Shop replaceable units (LRU/SRU)											
A4.8.1.1 Prime Mission Equipment Control Panel								-	-	-	-
A4.8.1.2 System Monitor and Control (SM&C) VAX 866 Main Chassis								-	-	-	-
A4.8.1.3 System Monitor and Control (SM&C) VAX 861 Expansion Chassis								-	-	-	-
A4.8.1.4 General Purpose Computer (GPC) VAX 866 Main Chassis								-	-	-	-
A4.8.1.5 General Purpose Computer (GPC) VAX 861 Expansion Chassis								-	-	-	-
A4.8.1.6 System Junction Boxes								-	-	-	-
A4.8.1.7 Versatile Media Mass Memory								-	-	-	-
A4.8.1.8 Removable Transportable Memory Module								-	-	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.8.1.9 Data Couplers								-	-	-	-
A4.8.2 Replace Data Display Subsystem LRU/SRU											
A4.8.2.1 Display Unit								-	-	-	-
A4.8.2.2 Advanced Digital Data Processor								-	-	-	-
A4.8.2.3 Data Entry Device								-	-	-	-
A4.8.2.4 Local Area Network Transceiver								-	-	-	-
A4.8.2.5 Operator Work Station Embedded Disk (OED)								-	-	-	-
A4.8.3 Data Recording Subsystem											
A4.8.3.1 Printer											
A4.8.4 Replace Radar Subsystem LRU/SRU											
A4.8.4.1 Radar Control Unit (RCU)								-	-	-	-
A4.8.4.2 Programmable Signal Processor (PSP)								-	-	-	-
A4.8.4.3 Signal Pre-Processor (SPP)								-	-	-	-
A4.8.4.4 Pulse Compression Unit (PCU)								-	-	-	-
A4.8.4.5 Receiver Analog to Digital Converter								-	-	-	-
A4.8.4.6 Antenna Servo Electronics (ASE)								-	-	-	-
A4.8.4.7 Exciter								-	-	-	-
A4.8.4.8 High Power Combiner (HPC)								-	-	-	-
A4.8.4.9 Transmitters								-	-	-	-
A4.8.4.10 Waveguide Assemblies								-	-	-	-
A4.8.5 Replace Antenna Group LRU/SRU											
A4.8.5.1 RF/IF Distribution Plate Assembly								-	-	-	-
A4.8.5.2 Receiver Channel Assembly (Down Converter)								-	-	-	-
A4.8.5.3 Post Regulator Circuit Card Assembly								-	-	-	-
A4.8.5.4 Phase Shifter Interface Module (PIM)								-	-	-	-
A4.8.5.5 Phase Shifter Circuit Card Assembly								-	-	-	-
A4.8.5.6 Phase Shifter Delay Lines								-	-	-	-
A4.8.5.7 Circulator Assembly								-	-	-	-
A4.8.5.8 RF Rotary Joint Assembly								-	-	-	-
A4.8.5.9 Waveguide Switch								-	-	-	-
A4.8.5.10 Waveguide Assembly								-	-	-	-
A4.8.5.11 Antenna Interface Module Control Processor (CP/AIM)								-	-	-	-

Attachment 4

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.8.5.12 Inertial Measurement Group								-	-	-	-
A4.8.5.13 Encoder Assembly								-	-	-	-
A4.8.5.14 Rotary Electromechanical Actuator Assembly (B1, B2)								-	-	-	-
A4.8.5.15 Forward/Aft Radome Manual Drive Flexible Shaft								-	-	-	-
A4.8.5.16 Forward/Aft Radome Motor Driven Flexible Shaft								-	-	-	-
A4.8.5.17 Surveillance Radome								-	-	-	-
A4.8.5.18 Surveillance Antenna								-	-	-	-
A4.8.5.19 Surveillance Antenna Packing/Unpacking								-	-	-	-
A4.8.6 Replace Computer Replacement Program (CRP) LRU/SRU											
A4.8.6.1 Central Computer (CC)								-	-	-	-
A4.8.6.2 CC Versa Module Europa (VME)								-	-	-	-
A4.8.6.3 CC Mass Storage Device (MSD)								-	-	-	-
A4.8.6.4 Remote Memory Module (RMM)								-	-	-	-
A4.8.6.5 Local Area Network (LAN) Hub (GIGA Switch)								-	-	-	-
A4.8.6.6 LAN Bridge								-	-	-	-
A4.8.6.7 Serial Data Hub								-	-	-	-
A4.8.6.8 FDDI Interconnect Cables								-	-	-	-
A4.8.7 Replace CRP Radar Sub-system LRU/SRU											
A4.8.7.1 Radar Airborne Signal Processor (RASP)		※						-	-	-	-
A4.8.8 Replace Operator Work Station (OWS) LRU/SRU											
A4.8.8.1 OWS Data Processor								-	-	-	-
A4.8.8.2 OWS MSD								-	-	-	-
A4.8.8.3 OWS Fiber Optic Patch Cable								-	-	-	-
A4.8.8.4 Remote Memory Module (RMM)								-	-	-	-
A4.8.8.5 Data Entry Device								-	-	-	-
A4.9 INTERMEDIATE MAINTENANCE											
A4.9.1 Special Support Equipment								-	-	-	-
A4.9.2 Principles of Operation								-	-	-	-

JSTARS TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC

SUMMARY OF CHANGES

This section is changed extensively. The use of special codes to identify a specific aircraft is deleted. This attachment contains the tasks for the E-8 (JSTARS) aircraft.

Supervisors should review this section in its entirety for additions and deletions.

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
NOTE 1: This attachment identifies the Air Force standardized STS Electronic Fundamentals and applications STS entries.											
NOTE 2: Only those items in column 4A that have proficiency level codes are trained in the Principles portion of the course.											
NOTE 3: Users may annotate additional devices or circuits not identified by this attachment that are specific to their AFSC IAW AFI 36-2201.											
A5.1 BASIC TERMS TR: TO 31-1-141-2, -5											
A5.1.1 Metric Notation								-	-	-	-
A5.1.2 Direct Current (DC) terms								B	-	-	-
A5.1.3 Alternating Current (AC) terms								B	-	-	-
A5.2 BASIC CIRCUITS TR: TO 31-1-141-2, -5											
A5.2.1 Theory of Operation								B	-	-	-
A5.2.2 Troubleshoot Circuits								2b	-	-	-
A5.3 BASIC CIRCUIT CALCULATIONS TR: TO 31-1-141-5											
A5.3.1 DC								B	-	-	-
A5.3.2 AC								B	-	-	-
A5.4 RESISTORS TR: TO 31-1-141-2, -15											
A5.4.1 Theory of Operation								B	-	-	-
A5.4.2 Color code								2b	-	-	-
A5.4.3 Isolate faulty resistors								2b	-	-	-
A5.5 RELAYS/SOLENOIDS TR: TO 31-1-141-2, -3											
A5.5.1 Relay Theory of Operation								B	-	-	-
A5.5.2 Isolate faulty relays								2b	-	-	-
A5.5.3 Solenoid theory of operation								B	-	-	-
A5.6 INDUCTORS TR: TO 31-1-141-2, -15											
A5.6.1 Theory of Operation								B	-	-	-
A5.6.2 Isolate faulty inductors								2b	-	-	-
A5.6.3 Calculations								-	-	-	-
A5.7 CAPACITORS TR: TO 31-1-141-2, -5, -15											
A5.7.1 Theory of Operation								B	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse 2b	(1) CDC	(1) Crse	(2) CDC
A5.7.2 Isolate faulty capacitors											
A5.7.3 Calculations								-	-	-	-
A5.7.4 Color code								-	-	-	-
A5.8 TRANSFORMERS TR: TO 31-1-141-2, -5, -15											
A5.8.1 Theory of Operation								B	-	-	-
A5.8.2 Isolate faulty transformers								2b	-	-	-
A5.8.3 Calculations								-	-	-	-
A5.9 THREE PHASE TRANSFORMERS TR: TO 31-1-141-2, -15											
A5.9.1 Theory of Operation								-	-	-	-
A5.9.2 Isolate faulty three phase transformers								-	-	-	-
A5.10 DC MOTORS TR: TO 31-1-141-2, -9											
A5.10.1 Theory of Operation								B	-	-	-
A5.10.2 Troubleshoot DC motors								-	-	-	-
A5.11 AC MOTORS TR: TO 31-1-141-2, -9											
A5.11.1 Theory of Operation								B	-	-	-
A5.11.2 Trouble shoot AC motors								-	-	-	-
A5.12 DC GENERATORS TR: TO 31-1-141-2, -9, -13											
A5.12.1 Theory of Operation								-	-	-	-
A5.12.2 Troubleshoot DC generators								-	-	-	-
A5.13 AC GENERATORS TR: TO 31-1-141-2, -9, -13											
A5.13.1 Theory of Operation								-	-	-	-
A5.13.2 Troubleshoot AC generators								-	-	-	-
A5.14 SYNCHRO/SERVOS TR: TO 31-1-141-2, -9											
A5.14.1 Theory of Operation								-	-	-	-
A5.14.2 Troubleshoot synchro/servos								b	-	-	-
A5.15 TRANSDUCERS TR: TO 31-1-141-3, -14											
A5.15.1 Theory of Operation								B	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.15.2 Isolate faulty transducers								-	-	-	-
A5.16 Meter Movements TR: TO 31-1-141-2, -7, -14C											
A5.16.1 Theory of Operation								-	-	-	-
A5.16.2 Isolate faulty meters								-	-	-	-
A5.17 SOLID STATE DIODES TR: TO 31-1-141-4, -15											
A5.17.1 Theory of Operation								B	-	-	-
A5.17.2 Isolate faulty solid state diodes								2b	-	-	-
A5.17.3 Specifications								-	-	-	-
A5.17.4 Color code								-	-	-	-
A5.18 BIPOLAR JUNCTION TRANSISTORS TR: TO 31-1-141-4											
A5.18.1 Theory of Operation								B	-	-	-
A5.18.2 Isolate faulty transistors								2b	-	-	-
A5.18.3 Specifications								-	-	-	-
A5.19 INTEGRATED CIRCUITS TR: TO 31-1-141-4											
A5.19.1 Familiarization								B	-	-	-
A5.19.2 Isolate faulty integrated circuits								-	-	-	-
A5.19.3 Specifications								-	-	-	-
A5.20 SOLID STATE SPECIAL PURPOSE DEVICES TR: TO 31-1-141-4											
A5.20.1 Theory of Operation								-	-	-	-
A5.20.2 Silicon Controlled Rectifier (SCR)								-	-	-	-
A5.20.3 Zener diode								B	-	-	-
A5.20.4 Tunnel diode								-	-	-	-
A5.20.5 Light Emitting Diode (LED)								B	-	-	-
A5.20.6 Liquid Crystal Diode (LCD)								B	-	-	-
A5.20.7 Unijunction Transistor (UJT)								-	-	-	-
A5.20.8 Junction Field Effect Transistor (JFET)								-	-	-	-
A5.20.9 Metal Oxide Semi-Conductor Field Effect Transistor (MOSFET)								-	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.20.10 Positive intrinsic negative (PIN) diode								-	-	-	-
A5.20.11 Varactor								-	-	-	-
A5.20.12 Isolate faulty special purpose devices								-	-	-	-
A5.21 ELECTRON TUBES TR: TO 31-1-141-1, -3, -9											
A5.21.1 Theory of Operation								-	-	-	-
A5.21.2 Isolate faulty CRTs								-	-	-	-
A5.22 CATHODE RAY TUBES (CRT) TR: TO 31-1-141-1, -3											
A5.22.1 Theory of Operation								-	-	-	-
A5.22.2 Isolate faulty CRTs								-	-	-	-
A5.23 SOLDER/DESOLDER TR: TO 00-25-234, 1-1A-14, 31-1-141-15											
A5.23.1 Terminal connections								2b	-	-	-
A5.23.2 Printed Circuit (PC) boards								2b	-	-	-
A5.23.3 Multipin connectors								2b	-	-	-
A5.23.4 Coaxial connectors								2b	-	-	-
A5.23.5 Pot connectors								-	-	-	-
A5.24 ASSEMBLE/DISASSEMBLE SOLDERLESS CONNECTORS TR: TO 1-1A-14, 31-1-141-15											
A5.24.1 Crimp connections	*							2b	-	-	-
A5.24.2 Coaxial connections	*							2b	-	-	-
A5.24.3 Multipin connections	*							2b	-	-	-
A5.25 USE TEST EQUIPMENT TR: TO 31-1-141-1, -7, -8, -9, -10											
A5.25.1 Analog multimeter								2b	-	-	-
A5.25.2 Oscilloscope								2b	-	-	-
A5.25.3 Signal Generator								2b	-	-	-
A5.25.4 Frequency counter								2b	-	-	-
A5.25.5 Spectrum Analyzer								2b	-	-	-
A5.25.6 Field Strength Tester								-	-	-	-
A5.25.7 Digital multimeter	*							-	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.25.8 Digital logic probe								-	-	-	-
A5.25.9 Capacitor tester								-	-	-	-
A5.25.10 Capacitor substitution box								-	-	-	-
A5.25.11 Logic current tracer								-	-	-	-
A5.25.12 Logic pulser								-	-	-	-
A5.25.13 Logic analyzer								-	-	-	-
A5.25.14 Signature analyzer								-	-	-	-
A5.25.15 Time Domain Reflectometer		*						-	B	-	-
A5.25.16 Serial Bus Analyzer								-	-	-	-
A5.25.17 Bonding Meter								-	-	-	-
A5.26 TRANSISTOR AMPLIFIER CIRCUITS TR: TO 31-1-141-1, -4											
A5.26.1 Theory of Operation								-	-	-	-
A5.26.1.1 Amplifier circuits								-	-	-	-
A5.26.1.2 Stabilization circuits								-	-	-	-
A5.26.1.3 Coupling circuits								-	-	-	-
A5.26.1.4 Troubleshoot circuits								-	-	-	-
A5.27 OPERATIONAL AMPLIFIERS (OP AMPS) TR: TO 31-1-141-4											
A5.27.1 Theory of Operation								-	-	-	-
A5.27.2 Isolate faulty operational amplifiers								-	-	-	-
A5.28 POWER SUPPLY CIRCUITS TR: TO 31-1-141-3, -4, -9, -15											
A5.28.1 Theory of Operation								-	-	-	-
A5.28.1.1 Rectifiers								B	-	-	-
A5.28.1.2 Filters								B	-	-	-
A5.28.2 Troubleshoot circuits								-	-	-	-
A5.29 VOLTAGE REGULATORS TR: TO 31-1-141-3, -4											
A5.29.1 Theory of Operation								B	-	-	-
A5.29.2 Troubleshoot circuits								-	-	-	-
A5.30 RESISTIVE/CAPACITIVE/INDUCTIVE (RCL) CIRCUITS TR: TO 31-1-141-2, -5											

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.30.1 Basic operation								-	-	-	-
A5.30.2 Resonant operation								-	-	-	-
A5.30.3 Troubleshoot circuits								-	-	-	-
A5.30.4 Calculations								-	-	-	-
A5.31 FREQUENCY SENSITIVE FILTERS TR: TO 31-1-141-2											
A5.31.1 Theory of Operation								-	-	-	-
A5.31.2 Troubleshoot circuits								-	-	-	-
A5.31.3 Calculations								-	-	-	-
A5.32 WAVE GENERATION CIRCUITS TR: TO 31-1-141-3, -4, -10											
A5.32.1 Theory of Operation								B	-	-	-
A5.32.1.1 Oscillators								B	-	-	-
A5.32.1.2 Multivibrators								B	-	-	-
A5.32.1.3 Wave shaping circuits								B	-	-	-
A5.32.2 Troubleshoot circuits								-	-	-	-
A5.33 LIMITER CIRCUITS TR: TO 31-1-141-4											
A5.33.1 Theory of Operation								-	-	-	-
A5.33.1.1 Diode								-	-	-	-
A5.33.1.2 Zener diode								-	-	-	-
A5.33.1.3 Transistor								-	-	-	-
A5.33.2 Troubleshoot circuits								-	-	-	-
A5.34 CLAMPER CIRCUITS											
A5.34.1 Theory of Operation								-	-	-	-
A5.34.2 Troubleshoot circuits								-	-	-	-
A5.35 DIGITAL NUMBERING SYSTEMS TR: TO 31-1-141-5											
A5.35.1 Conversion								-	-	-	-
A5.35.1.1 Binary								2b	B	-	-
A5.35.1.2 Octal								2b	B	-	-
A5.35.1.3 Hexadecimal								2b	B	-	-
A5.35.2 Math operations											

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.35.2.1 Binary								2b	B	-	-
A5.35.2.2 Octal								-	B	-	-
A5.35.2.3 Hexadecimal								-	B	-	-
A5.35.3 Binary code systems								-	-	-	-
A5.36 DIGITAL LOGIC FUNCTIONS TR: TO 31-1-141-4, -9											
A5.36.1 Theory of Operation								B	-	-	-
A5.36.1.1 Main Logic Gates								B	B	-	-
A5.36.1.2 Flip-Flops								B	B	-	-
A5.36.2 Troubleshoot circuits								-	-	-	-
A5.36.3 Logic families											
A5.36.3.1 Transistor to Transistor Logic (TTL)								B	B	-	-
A5.36.3.2 Complementary Metal Oxide Semi-Conductor (CMOS)								-	-	-	-
A5.37 BOOLEAN EQUATIONS TR: TO 31-1-141-5											
A5.37.1 Diagram to equation								-	-	-	-
A5.37.2 Equation to diagram								-	-	-	-
A5.37.3 Simplify expressions								-	-	-	-
A5.38 COMPUTERS TR: TO 31-1-141-6C, -9											
A5.38.1 Computer Theory								B	B	-	-
A5.38.2 Software											
A5.38.2.1 Operating system								B	-	-	-
A5.38.2.2 Virus protection								B	-	-	-
A5.38.2.3 Diagnostics								B	-	-	-
A5.38.2.4 Applications								B	-	-	-
A5.38.3 Load programs								-	-	-	-
A5.38.4 Write and debug programs								-	-	-	-
A5.38.5 Isolate faulty major computer units								-	-	-	-
A5.38.6 Troubleshoot subassemblies/circuits								-	-	-	-
A5.38.7 Types of memories								-	B	-	-
A5.38.8 Peripheral devices								B	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.38.9 Programming languages								-	-	-	-
A5.39 MICROPROCESSOR CONTROLLED SYSTEMS TR: TO 31-1-141-6C, -9											
A5.39.1 Theory of Operation								-	-	-	-
A5.39.1.1 Basic								-	-	-	-
A5.39.1.2 Universal								-	-	-	-
A5.39.1.3 8085 Specific								-	-	-	-
A5.39.2 Isolate faulty microprocessors								-	-	-	-
A5.40 LOGIC CIRCUITS TR: TO 31-1-141-3, -5, -9, -13											
A5.40.1 Theory of Operation								-	-	-	-
A5.40.1.1 Counters								-	-	-	-
A5.40.1.2 Registers								-	-	-	-
A5.40.1.3 Combination logic circuits								-	-	-	-
A5.40.2 Troubleshoot circuits								-	-	-	-
A5.41 DIGITAL TO ANALOG AND ANALOG TO DIGITAL CONVERTERS TR: TO 31-1-141-13											
A5.41.1 Theory of Operation								B	B	-	-
A5.41.2 Isolate faulty converters								-	-	-	-
A5.42 TRANSMISSION LINES TR: TO 31-1-141-7, -8, -9, -11											
A5.42.1 Theory of Operation								B	B	-	-
A5.42.2 Perform measurements								-	-	-	-
A5.42.3 Calculations								-	-	-	-
A5.42.4 Isolate faulty transmission lines								-	-	-	-
A5.43 WAVEGUIDES TR: TO 31-1-141-9, -11											
A5.43.1 Theory of Operation								B	-	-	-
A5.43.2 Fault Isolation								-	-	-	-
A5.44 MICROWAVE OSCILLATORS AND AMPLIFIERS TR: TO 31-1-141-3, -10, -11											
A5.44.1 Theory of Operation								-	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.44.2 Tune or adjust								-	-	-	-
A5.44.3 Isolate faulty microwave oscillators and amplifiers								-	-	-	-
A5.45 RESONANT CAVITIES TR: TO 31-1-141-3, -9, -11											
A5.45.1 Theory of Operation								-	-	-	-
A5.45.2 Isolate faulty resonant cavities								-	-	-	-
A5.45.3 Tune or adjust								-	-	-	-
A5.46 TRANSMITTERS TR: TO 31-1-141-4, -9, -13											
A5.46.1 Theory of Operation								-	-	-	-
A5.46.1.1 Amplitude Modulation								B	-	-	-
A5.46.1.2 Frequency Modulation								B	-	-	-
A5.46.1.3 Single Side Band								-	-	-	-
A5.46.1.4 Pulse Modulation								-	-	-	-
A5.46.2 Troubleshoot circuits								-	-	-	-
A5.47 RECEIVERS TR: TO 31-1-141-4, -9, -13											
A5.47.1 Theory of Operation								-	-	-	-
A5.47.1.1 Amplitude Modulation								B	-	-	-
A5.47.1.2 Frequency Modulation								B	-	-	-
A5.47.1.3 Single Side Band								-	-	-	-
A5.47.1.4 Pulse Modulation								-	-	-	-
A5.47.2 Troubleshoot circuits								-	-	-	-
A5.48 ANTENNAS TR: TO 31-1-141-12											
A5.48.1 Theory of Operation								B	-	-	-
A5.48.2 Perform alignments								-	-	-	-
A5.48.3 Isolate faulty antennas								-	-	-	-
A5.49 PHOTSENSITIVE DEVICES TR: TO 31-1-141-3, 4											
A5.49.1 Theory of Operation								-	-	-	-
A5.49.2 Isolate faulty photosensitive devices								-	-	-	-

ELECTRONIC PRINCIPLES TRAINING REQUIREMENTS

2A5X3D

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.50 SUPPORT SUBJECTS TR: TO 31-1-141-1, 00-25-234 AFR 80-23, 700-13											
A5.50.1 Electronics safety								B	B	-	-
A5.50.2 First aid for electrical shock								B	B	-	-
A5.50.3 Electrostatic discharge (ESD) control								B	B	-	-
A5.50.4 Electromagnetic effects on electronic equipment											
A5.50.4.1 Pulse (EMP)								B	-	-	-
A5.50.4.2 Interference (EMI)								B	-	-	-

SECTION B - COURSE OBJECTIVE LIST

4. Measurement. Each coded CFETP task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective is composed of a condition, behavior and standard; which states what is expected of the student for each task. The condition is the setting in which the training takes place (i.e. TOs, type of equipment, etc). The behavior is the observable portion of the objective (i.e. perform an operational check). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter code(s) to identify how it is measured. All objectives use the PC code(s), which indicates a progress check is used to measure subject or task knowledge. **W** indicates a comprehensive written test and is used to measure the subject or task knowledge at the end of a block of instruction. **PC/W** indicates a subject or task knowledge progress check and a separate measurement of both knowledge and performance elements using a written test.

5. Standard. The standard of written examination is 70%. Standards for performance are indicated in the objective and are also indicated on the individual progress check checklist. The checklist is used by the instructor to document each student's progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

6. Proficiency Level. Review column 4A of the CFETP to determine the proficiency level of a particular task or knowledge item. Review the course objective list to determine which STS item the objective supports. Review the proficiency code key in Part II, Section A of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the "2b" proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step-by-step procedures for doing the task. For tasks that are taught to the "3c" proficiency level, students can do all parts of the task and only require a spot check on completed work (competent). The student can also identify why and when a task must be done and why each step is needed.

7. Course Objective. A detailed listing of the initial skills or craftsman course objectives may be obtained by submitting a written request to the AETC Training Manager at, 365 TRS/TRR, 609 9th Ave., Sheppard AFB TX, 76311-2335, DSN 736-7891.

SECTION C - SUPPORT MATERIALS

8. The following list of support materials is not all-inclusive; however, it covers the most frequently referenced areas. For further information on the following courses, contact the OPR.

9. Exportable Courses. Complete lists of exportable courses can be found at www.hill.af.mil/367TRSS/findex.htm and <https://hq2af.keesler.af.mil>.

<u>COURSE NUMBER</u>	<u>TITLE</u>	<u>OPR</u>
A6ANU00TCB0000	FOD Prevention	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160

<u>COURSE NUMBER</u>	<u>TITLE</u>	<u>OPR</u>
C5AKM00TVT0001	Safety and Radio Frequency (RF) Radiation	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
C5AKM00TVT0011	Cold Weather Safety	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
A6ANU00TIV0691	Aerospace Corrosion Prevention & Control	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
A6AKM00TVTAG05	Aircraft Deicing Using the TM-1800 Landoll Deicer	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
C6AGM00QIV1000	Aircraft Marshaling	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
C6ANU35TIV1100	C-135 Emergency Ground Egress	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
A6ANU00TIV2800	Aircraft Schematic Diagram Familiarization	367 TRSS/TSIE 6058 Aspen Hill AFB, UT 84056-5805 DSN 777-0160
J6ANU00066 044	Technical Order System (General)	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206
J6ANU00066 045	Technical Order System (Advanced)	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206

COURSE NUMBER	TITLE	OPR
J6ANU00066 046	IMDS For Backshop	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206
J6AZU00066 047	IMDS for Supervisors	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206
J6AZU00066 061	Core Automated Maintenance System (CAMS) Operators Course (Introduction)	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206
J6AZU00066 062	Core Automated Maintenance System (CAMS) (Mid-Level Maintenance Managers)	362 TRS/DOP 613 10th Ave Sheppard AFB, TX 76311-2352 DSN 736-5206
J6AJI3S251 000	AF Training Course (Exportable)	82 TRG/TRSS 620 9th Ave Sheppard AFB, TX 76311-2337 DSN 736-2056
L6AZS2E351 013	STP COMSEC Awareness Training	342 TTS/TTSCD 1220 Truemper St, Suite 1 Lackland AFB, TX 78236-5546 DSN 473-2957

SECTION D - TRAINING COURSE INDEX

10. Purpose. This section of the CFETP identifies training courses available for the Airborne Surveillance Radar System Specialty and shows how the courses are used by each MAJCOM in their career field training programs. Below is a list of available courses for broadening and expanding career field knowledge. For further information on the following courses, contact the 2A5X3D Training Manager at, 365 TRS/TRR, 609 9th Ave., Sheppard AFB TX, 76311-2335, DSN 736-7891.

11. Air Force In-residence Courses.

COURSE NUMBER	TITLE	OPR
E3AQR2A533D 344	Electronic Principles (CETP)	332 TRS/TRR 613 Hangar Rd, Keesler AFB MS 39534-2037 DSN 597-5355

COURSE NUMBER	TITLE	OPR
J3ABR2A533D 000	Airborne Surveillance Radar System Apprentice	365 TRS/TRR 609 9 th Ave. Sheppard AFB, TX 76311-2335 DSN 736-7891
J3ACR2A573 001	Craftsman Avionics	365 TRS/TRR 609 9 th Ave. Sheppard AFB, TX 76311-2335 DSN 736-7891

12. Training Detachment (TD) Courses:

* Indicates mandatory courses. For further information on the TD courses, contact the OPRs.

COURSE NUMBER	TITLE	OPR
J4ASF2A5X3D 008	AN/APY-1/-2 Antenna Group	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
J4ASF2A5X3D 012	AN/APY-1/-2 Transmitter Group (E-3)	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
*J4ASF2A5X3D 048	E-8C Surveillance Maintenance Technician	373 TRS/Det 6 625 9 th St Ste A Robins AFB, GA, 31098 DSN 468-5595
J4ASF2A5X3D 049	AN/APY-1/-2 RSIP Differences, Operation and Fault Isolation E-3	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
J4ASF 2A5X3D 050	E-3 Radar Special Test Equipment Operation and Maintenance	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
J4ASF2A5X3D-051	AN/APY-1/2 Analog Cabinet Group (E-3)	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540

COURSE NUMBER	TITLE	OPR
J4ASF2A6X2 057	Universal Maintenance Stand (UMS) Split Deck Operator	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
J4ASF2A6X2 059	Aerospace Ground Operator	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540
*J4ASF2A5X3D 000	E-8 Airborne Surveillance Radar Systems (FOLLOW-ON)	373 TRS/Det 6 625 9 th St Ste A Robins AFB, GA, 31098 DSN 468-5595
*J4ASF2A5X3D 001	E-3 Airborne Surveillance Radar Systems (Apprentice Follow-on)	373 TRS/Det 9 7710 1 st Ave Tinker AFB, OK, 73145 DSN 884-5540

13. Extension Course Institute (ECI) Courses.

* Indicates course is mandatory.

COURSE NUMBER	TITLE	OPR
*CDC2A553D	Airborne Surveillance Radar System Journeyman	365 TRS/TTTCF 613 10 th Ave Sheppard AFB, TX 76311-2335 DSN 736-1519
*CDC2A553E	Airborne Warning and Control /Interrogator Systems Journeyman	365 TRS/TTTCF 613 10 th Ave Sheppard AFB, TX 76311-2335 DSN 736-1519
*CDC2A573F	Joint Surveillance Target Attack Radar System Journeyman	365 TRS/TTTCF 613 10 th Ave Sheppard AFB, TX 76311-2335 DSN 736-1519

14. Courses Under Development/Revision.

Courses under development are included in paragraphs 11-13 and are indicated as (IN DEVELOPMENT)

SECTION E - MAJCOM UNIQUE REQUIREMENTS

15. Currently only Air Combat Command has a MAJCOM mandatory course list (MMCL). MAJCOMs change mandatory course requirements occasionally. Up-to-date ACC requirements can be obtained at <https://lg.acc.af.mil/lgq/lgqt/NEWLGQTHOME.htm>. After access, click on "MMCL". Refer to the HQ ACC MMCL for additional information.

16. Additional Courses available from ACC.

Contact the MAJCOM functional manager at DSN 574-3736 or the AETC training manager at DSN 736-7891.

17. 2A5X3D STS COURSE MATRIX.

This training matrix contains training tasks for the mandatory FTD courses J4ASF2A5X3D-000 and J4ASF2A5X3D-001 listed in section D paragraph 12. It should be used in conjunction with attachments 3 and 4 of this CFETP. Training task numbers and identities are consistent between attachments 3, 4 and this matrix. Training task A3.2.3.1.1, Screen Hierarchy in attachment 3 and the matrix are the same task, and would include teaching the screen hierarchy of the RCMC on the AWACS aircraft. Training task A4.8.3.1 would teach the procedures to replace the E-8 Radar Control Unit (RCU).

NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.			
STS ITEM NUMBER			
A3.2.2.1.1.1	Screen Hierarchy	2b	-
A3.2.2.1.1.2	Fast Fourier Transformer	2b	-
A3.2.2.1.1.3	Plan Position Indicator	2b	-
A3.2.2.1.1.4	RCDU Controls and Indicators	2b	-
A3.3.1.2.2.1	Perform measurements	2b	-
A3.3.1.2.2.2.	Perform calculations	2b	
A3.3.1.2.9	Use Frequency Counter	2b	-
A3.3.1.2.10	Use Reflectometer	2b	-
A3.3.1.2.11	Oscilloscope	2b	-
A3.3.1.2.12	Spectrum Analyzer	2b	-
A3.4.3.	Perform Wire Wrapping	2b	
A3.4.4.	Replace Pickle Forks	2b	
A3.4.5.1	Using Visual checks	2b	-
A3.4.5.2	Comparing test results with TO	2b	-
A3.4.5.3	Performing Symptoms analysis using TO diagrams	1b	-
A3.4.5.4	Tracing Signals	1b	-
A3.4.5.5	Performing Component substitution	2b	-
A3.4.5.6	Performing Continuity Checks	2b	-
A3.4.5.7.	Perform Rotary Joint Brush Block Inspection	2b	
A3.4.5.8.	Rotate the rotodome	2b	

NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.			
STS ITEM NUMBER			
A3.6.1.1	RSIP Radar – Turn on procedures	2b	-
A3.6.1.2	Interpret messages and verify performance	2b	-
A3.6.1.3	Mask Continuously Monitored Parameters	2b	-
A3.6.1.4	Inhibit Automatic Testing	2b	-
A3.6.1.5	Reconfigure	2b	-
A3.6.1.6	RSIP Memory Functions	2b	-
A3.6.1.7	RSIP Special Testing	2b	-
A3.6.1.8	Initiate/Perform Individual Special Tests	2b	-
A3.6.1.9	Wake-up	2b	-
A3.6.1.10	RCA	2b	-
A3.6.1.11	Initiate / Perform Radar Test	2b	-
A3.6.1.12	Configuration Evaluation	2b	-
A3.6.1.13	Non Interruptive Testing	b	-
A3.6.1.14	Normal Power Down Procedures	2b	-
A3.6.1.15	Emergency Power Down Procedures	b	-
A3.6.2.1	Solenoid Current	b	-
A3.6.2.2	Beam Voltage	b	-
A3.6.2.3	Collector Current	b	-
A3.6.2.4	KPA Burn In	b	-
A3.6.2.5	Average Power Calibration	b	-
A3.6.2.6	TAC Peak Power	b	-
A3.6.2.7	TAC Curve Calibration	b	-
A3.6.2.8	Phase Compensation Calibration	b	-
A3.6.2.9	Reflected Power Calibration	b	-
A3.6.2.10	Transmitter Peak Power Calibration	b	-
A3.6.3.1.2	Path Insertion	b	-
A3.6.3.1.3	10db Loss Measurement	b	-

NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.			
STS ITEM NUMBER			
A3.6.3.1.4	40db Loss Measurement	b	-
A3.6.3.1.5	VCA Loss Measurement	b	-
A3.6.3.1.6	Power Correction	b	-
A3.6.3.1.7	Target Power Adjustment	b	-
A3.6.3.1.8.1	Line Loss	b	-
A3.6.3.1.8.2	Noise Measurement	b	-
A3.6.3.1.8.3	Noise Diode Calibration	b	-
A3.6.4.1.1	RDP	2b	-
A3.6.4.1.2	Unit	2b	-
A3.6.4.1.3	System	2b	-
A3.6.5.1.1	RDP	b	-
A3.6.5.1.2	RIAU	b	-
A3.6.5.1.3	RCMC	b	-
A3.6.5.1.4	STALO	b	-
A3.6.5.1.5	Synchronizer	b	-
A3.6.5.1.6	Analog Receiver	b	-
A3.6.5.1.7	ASP	b	-
A3.6.5.1.8	Rotodome	b	-
A3.6.5.1.9	Transmitter	b	-
A3.6.5.1.10	Maritime Receiver	b	
A3.6.5.1.11	DLMB	b	
A3.6.5.2.1	Steering	2b	-
A3.6.5.2.2	RF	2b	-
A3.6.5.2.4	Perform operational checkout	2b	-
A3.6.7.1	Reset and Recycle Control	2b	-
A3.6.7.4	Edit Calibration Data	b	-
A3.6.7.5	Copy RIAU EEPROM Data	b	-

NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.			
STS ITEM NUMBER			
A3.6.8.1	Enter / Exit Console Mode	b	-
A3.6.8.2	Mount / Dismount Disk	b	-
A3.6.8.3	Quicklook Testing	b	-
A3.6.8.4	RDP File Configuration	b	-
A3.6.8.5	Poll RDP Circuits	b	-
A3.6.8.6	Disk Utilities	b	-
A3.6.8.7	EEPROM Maintenance	b	-
A4.3.1.2.5	Radio Frequency Line Test Set (RFLTS)	-	2b
A4.3.1.2.6	Network/LAN Analyzer	-	2b
A4.3.1.2.7	1553 Bus Analyzer	-	2b
A4.3.1.2.9	Time Domain Reflectometer (TDR)	-	2b
A4.3.1.2.10	Multimeter	-	2b
A4.3.2.5	Line Replaceable Unit (LRU) Handling Dolly	-	2b
A4.3.2.6	Monorail and Handling Sling	-	2b
A4.4.1	Schematic and Wiring Diagrams	-	b
A4.5.1.1.1	Data Processing Subsystem	-	2b
A4.5.1.1.2	Data Display Subsystem	-	2b
A4.5.1.1.3	Radar Subsystem	-	2b
A4.5.1.2	Monitor and Control System Operation	-	2b
A4.5.1.2.1	Operation of Radar Control Unit (RCU) Monitor	-	2b
A4.5.1.2.2	Operation of Performance Monitoring (PM) Background	-	2b
A4.5.1.2.3	Operation of Operation and Control Operational (OCO) Task Monitor	-	2b
A4.5.1.3	Data Processing Subsystem (CRP)	-	2b
A4.5.1.4	Data Display Subsystem (CRP)	-	2b
A4.5.1.5	Radar Subsystem (CRP)	-	2b
A4.5.1.6	Configure Equipment for Operational Use	-	2b
A4.5.1.9	Terminate PME System operation	-	2b

NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.			
STS ITEM NUMBER			
A4.5.1.10.1	Radar Referenced Coverage Area	-	2b
A4.5.1.10.2	Ground Referenced Coverage Area	-	2b
A4.5.1.10.3	Sector Search	-	2b
A4.5.1.10.4	Synthetic Aperture Radar	-	2b
A4.5.1.10.5	Antenna Patterns	-	2b
A4.5.2.3	Data Processing Subsystem (CRP)	-	2b
A4.5.2.3.1	Central Computer (CC)	-	2b
A4.5.2.4	Data Display Subsystem (CRP)	-	2b
A4.5.2.4.1	OWSDP	-	2b
A4.5.2.6.1	RSG	-	2b
A4.5.2.6.2	RSE	-	2b
A4.5.2.6.3	RCU	-	2b
A4.5.2.6.4	RASP	-	2b
A4.5.3.3	Data Processing Subsystem (CRP)	-	2b
A4.5.3.4	Data Display Subsystem (CRP)	-	2b
A4.5.3.5	Radar Subsystem	-	2b
A4.5.4.1	Operational Readiness Test (ORT)	-	b
A4.5.4.2	Online Tests	-	b
A4.5.4.3	Diagnostic Tests	-	b
A4.6.1	Operational Readiness Test (ORT) results	-	b
A4.6.2	On-line Testing results	-	b
A4.6.3	Diagnostic Testing results	-	b
A4.6.5	Perform Visual checks	-	b
A4.6.6	Compare Test Results with TO	-	b
A4.6.9	Perform Component Substitution	-	2b
A4.6.10	Perform Continuity Checks	-	2b
A4.7.5.	Enter and Exit Forward Lower Lobe	-	2b

<p>NOTE 1: Course J4AMF/ASF2A5X3D-000, E-8 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.</p> <p>NOTE 2: Course J4AMF/ASF2A5X3D-001, E-3 Airborne Surveillance Radar Systems (Follow-on) is mandatory for all 2A5X3D personnel assigned to E-8 aircraft.</p>		J4AMF/ASF2A5X3D-001	J4AMF/ASF2A5X3D-000
STS ITEM NUMBER			
A4.7.2.1	Operation of MLV Utility	-	2b
A4.7.2.1.1	RSE MLV Utility	-	2b
A4.7.2.1.2	RCU MLV Utility	-	2b
A4.7.2.1.4	RASP	-	2b
A4.7.2.2.1	RSE OPS-113a	-	2b
A4.7.2.2.2	RCU OPS-114a	-	2b
A4.7.2.2.4	RASP OPS-199a (CRP)	-	2b
A4.7.2.2.5	General Equipment OPS-118a	-	2b
A4.8.2.1	Display Unit	-	2b
A4.8.4.1	Radar Control Unit (RCU)	-	2b
A4.8.4.5	Receiver Analog to Digital Converter	-	2b
A4.8.4.6	Antenna Servo Electronics (ASE)	-	2b
A4.8.4.7	Exciter (XCTR)	-	2b
A4.8.4.8	High Power Combiner (HPC)	-	2b
A4.8.4.9	Transmitters	-	2b
A4.8.4.10	Waveguide Assemblies	-	2b
A4.8.5.14	Rotary Electromechanical Actuator Assembly (B1, B2)	-	2b
A4.8.6.1	CC	-	2b
A4.8.6.2	CCVME (SRU)	-	2b
A4.8.6.3	CCMSD	-	2b
A4.8.6.4	Remote Memory Module (RMM)	-	2b
A4.8.6.5	LAN Hub (GIGA switch) (SRU)	-	2b
A4.8.6.8	FDDI Interconnect Cables	-	2b
A4.8.7.1	RASP (SRU)	-	2b
A4.8.8.1	OWS Data Processor	-	2b
A4.8.8.5	Data Entry Device	-	2b